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ABSTRACT

Divided into two sections, this booklet demonstrates how the discovery/inquiry approach and values clarification can be used to teach population education. Each part presents a theoretical discussion of a teaching method including its definition, its relevance to population education, some outstanding characteristics that make it suitable for teaching population education, plus what research studies have discovered about its effectiveness. The actual procedure for applying the methodology is given in a step-by-step manner, including guidelines for teachers and implications for classroom teaching. A number of sample lessons are included. Part 1, the discovery/inquiry-oriented approach deals with determinants of family size; consequences of rapid population growth for community health; effects on socio-economic development; effects of family size, parity, and spacing on the health of the mother and the family; and effects of population growth on food production. Part 2, values clarification, consists of 10 sample lessons and uses a variety of strategies concerning family size, and values regarding pros and cons of population control. Learning strategies described in the program expect students to approach problems with an open mind, to study evidence clearly, and to make judgements based on their own activities. (AG)

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PROBLEMS!
Problems!

TEACHING METHODOLOGIES FOR POPULATION EDUCATION

Investigate

- INQUIRY / DISCOVERY APPROACH
- VALUES CLARIFICATION

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INTRODUCTION

HOW TO TEACH POPULATION EDUCATION

This package is the companion material for the Abstract-Bibliography Series 5 entitled, "Teaching Methodologies for Population Education", and the 30-minute video programme of the same title. The abstract-bibliography series provides a comprehensive listing of abstracted reference materials on a variety of teaching methodologies, while the 30-minute video programme serves as a springboard for training discussions. This package focuses on more substantive procedural guidelines and sample lessons for two teaching methods: the discovery or inquiry approach and values clarification as applied in population education.

The teaching of population education requires subject competence and the mastery of non-traditional teaching methods. Population is a value-laden subject. Because the subject matter is controversial, choices should not be imposed; the teacher must help the students make responsible decisions arrived at from a rational study of alternatives. Although the teacher must give students access to facts, he cannot simply hand down ready-made answers. The students must be given the opportunity to explore their own feelings, thinking and value structure regarding all the possible aspects of the phenomenon. This process will enable the students to make responsible decisions regarding their reproductive behaviour now and in the future.

In this context, the appropriate method used to teach population education is not the traditional lecture method where the teachers tell students how to behave or what to say. In the ideal teaching situation, the students are given the opportunity to study various alternatives and the pros and cons of an issue, on which they rationally base their answers. Examples of these non-traditional teaching methodologies include the inquiry or discovery approach, problem-solving, values clarification, and game/role playing. Only a few countries in Asia are seriously attempting to use these methodologies in teaching population education. Even then, the understanding and use of such methods still leaves much to be desired.

The primary purpose of this package is, thus, to demonstrate step-by-step how these methodologies are used and more concretely, how they can be applied in teaching specific issues in population education. Trainers and teachers are the target audiences of this package; however, curriculum developers and students will greatly benefit from this material as well.

This package consists of two booklets covering the discovery or inquiry-oriented approach, and values clarification. Each part presents first a theoretical discussion of the teaching methodology that includes its definition, its relevance to population education, some outstanding characteristics that make it suitable for teaching population education and what research studies have discovered with regard to its effectiveness. Then, the actual procedure for applying the methodology is given in a step-by-step manner, including guidelines for teachers and implications for classroom teaching. To demonstrate more concretely how the methodology is applied to specific population education issues, a number of sample lessons are presented.

Part One, *the discovery/inquiry-oriented approach,* consists of six sample lessons. These sample lessons deal with the following population topics: determinants of family size; consequences of rapid population growth for community health; effects of population growth on socio-economic development; effects of family size, parity and spacing on the health of the mother and other family members and effects of population growth on food production.

Part Two, *Values clarification,* consists of 10 sample lessons which use a variety of values clarification strategies such as: (a) the valuing process by Raths, Harmin and Simon; (b) values clarification through the use of songs and poetry; (c) moral dilemma strategy; (d) social issues model; (e) use of pictures, values voting, self-contracts, values grid, values sheets, I Learned Statements, 20 Things You Love To Do; Personal Coat of Arms; and (f) Four Phases of values clarification. The majority of the lessons deal with values that concern family size and values regarding the pros and cons of population control.

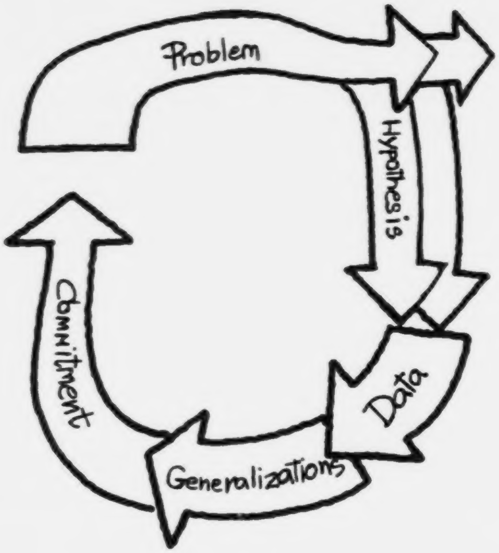
Readers will see that the learning strategy described and justified in this document requires students to develop skills of discovery, initiative and creativity. It also expects them to approach problems with an open mind, study evidence carefully and make judgements on their own actions and for consideration by other people. If these skills and attitudes are to be regarded as important, then testing procedures to see that they are acquired must be part of the formative and summative evaluation systems of schools and school systems. The development of suitable test procedures is an ongoing task, as efforts are made to ensure that education serves the future needs of today's students.

The majority of the lessons have been compiled (extracted and reprinted with permission) from materials and publications produced by the Population Education Programme of the Ministry of Education, Culture and Sports, the Population Centre Foundation of the Philippines and the Unesco Regional Office for Education in Asia and the Pacific. The main reason why the majority of the lessons are derived from the Philippines is that it is the only country in Asia which is seriously using these non-traditional teaching methodologies in population education. We hope that the experience gained in the Philippines in the application of these methodologies will be of use to other countries in the region.

THE INQUIRY/DISCOVERY APPROACH AS A TEACHING METHOD FOR POPULATION EDUCATION

A THEORETICAL DISCUSSION OF INQUIRY/ DISCOVERY APPROACH AS A TEACHING METHOD FOR POPULATION EDUCATION *

Introduction



Objectives:

The reader should be able to:

1. Define the inquiry approach and its use in population education
2. Enumerate some of the characteristics of the inquiry approach
3. Apply the steps of the inquiry approach in the classroom
4. Distinguish the inquiry approach from the expository approach as a teaching method when presented with a teaching situation
5. Apply the guidelines and sample teaching lessons in the classroom
6. Describe the role of the teacher in the inquiry approach teaching

Population education is aimed at influencing the students' attitudes and behaviour over time, until they become parents. It is taken for granted that the subject matter is controversial.

These two considerations necessitate developing in a student the skills for making responsible decisions about the controversial issue of his reproductive behaviour. In making responsible decisions, the student has to have complete information concerning an issue. Only through an analysis of the pros and cons and exploration of alternative actions can the student arrive at a responsible decision.

Given this objective and the controversial nature of the subject matter, it is obvious that the teaching method appropriate to population education *cannot* be one in which the teacher dictatorially tells students that *this* behaviour is *the* right one and all others are wrong. Rather, the ideal teaching method should present and evaluate plausible alternatives in terms of the advantages and disadvantages associated with each. And on the basis of this evaluation, a given alternative is either accepted or rejected – with the clear understanding that the right decision for one may be the wrong decision for another. In short, what the population education programme aims to develop is the type of student who can freely make responsible decisions, rather than one who will, automatically and unthinkingly, decide on a small family.

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* This theoretical discussion has been adapted from the following publications:

1. De la Cruz, Leonardo. *Towards a better understanding of population education.* Bangkok: Unesco Regional Office for Education in Asia & the Pacific, 1983, p. 4-6.
2. Population Education Programme. *Module on the inquiry approach in the teaching of population education.* Manila: Ministry of Education, Culture & Sports, 1984, p. 1-24.
3. Villanueva, Carmelita. *On the effectiveness of the discovery approach as a teaching method for population education.* Makati: Population Centre Foundation, 1976, p. 17-22.
4. Unesco. *Population education: a source book on content & methodology.* Bangkok: Unesco Regional Office for Education in Asia & the Pacific, 1980, p. 69.

The programme aims to develop the type of students who can observe, describe, predict and understand what changes in population mean: what is the effect on the family of having few or many children; what is the effect on society of having many more younger people than older people in the population; what affects the growth of population more – birth rates or death rates, etc. If students are personally involved in the process of learning about the population situation and feel that they arrived at an understanding of the situation themselves, then the knowledge will be more meaningful than if it were given in a lecture. As a result, the influence on the students' attitudes and behaviour will be deeper and more lasting.

It is not surprising, therefore, that in choosing the teaching method to use in population education, curriculum developers have settled on the so-called discovery or inquiry approach.

What is the inquiry approach?

The inquiry approach is a teaching style where the learner, with the minimum guidance from the teacher seeks to discover and create an answer to a recognized problem by:

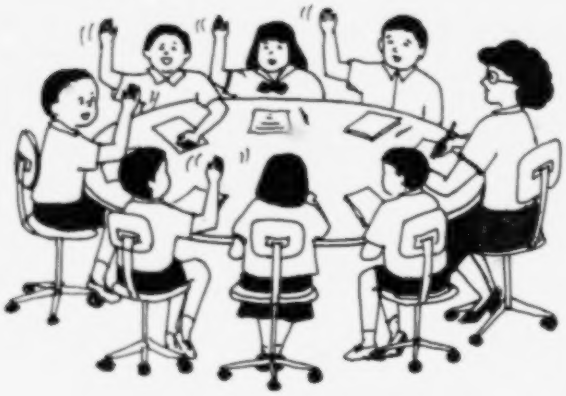
1. **Defining a problem**
2. **Formulating the hypothesis/es**
3. **Gathering data**
4. **Reporting data/findings**
5. **Testing the hypothesis/es**
6. **Formulating a conclusion**
7. **Stating one's commitment or applying the conclusion.**

Inquiry is not the discovery of an answer that is lifted from a book but rather, the development of an answer by the learner himself, based on the result of his own investigations. This means that in his search for the answer to the problem, the student pores over several sources of relevant information, analyzes these, organizes the information, concludes and decides on the best alternative solution. Briefly defined, the inquiry approach means getting answers to questions through the collection and analysis of data.

The term "Inquiry approach" has been used interchangeably with such terms as "discovery approach", "problem solving", "inductive method", "deductive method", "conceptual approach", "process approach", and Socratic questioning. This causes some confusion. While it is true that these terms do not involve exactly the same steps, they share one common point, which is the placing of a high premium on the learner's thinking and finding. In all these approaches, called by one name or another, the learners are actively involved in the process of investigating, searching, defining a problem, formulating hypotheses, gathering and interpreting data, and forming a conclusion.

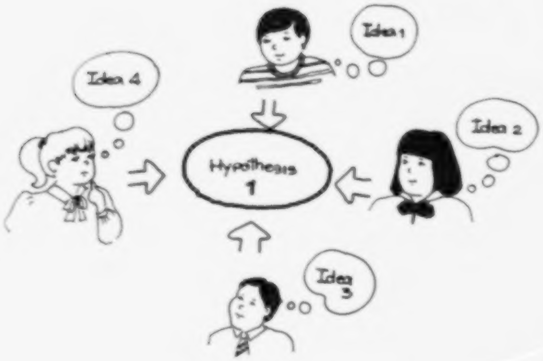
To resolve the confusion, the inquiry approach has been redefined by Massialas and Cox (1966: 12-13) as an environment or orientation of teaching and learning rather than a specific method. Teaching methodology can be viewed as a continuum of alternatives, with the traditional expository method at one extreme and the inquiry approach at the other. The difference between the discovery approach and the expository method of teaching is that in the traditional approach, the teacher controls the information which is to be discussed. The teacher sets the framework and calls upon the students to fill in the sequence of information which she wishes to develop through knowledge recall and memorization. On the other hand, the discovery method requires more than just remembering information. The students are actively involved in the processes of defining problems, categorizing data, setting hypotheses and taking positions to develop critical thinking.

Characteristics of a reflective classroom



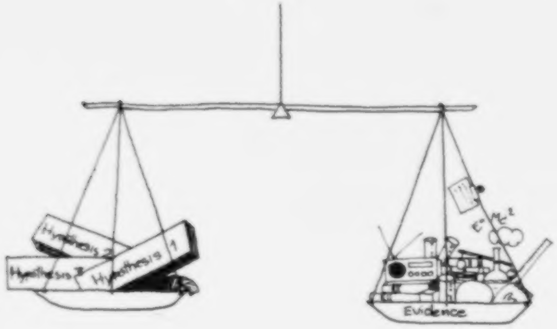
1. **There is an open climate for discussion.**

All points of view are entertained and accepted as tentative answers that merit investigation, thus promoting a wholesome social atmosphere which is very important in carrying out the process of inquiry.



2. **Focus is on hypotheses.**

The discussion is centred on the hypothetical solutions of the problem and the nature of the hypotheses themselves. Both students and teachers must engage in continuous learning interaction, gather data relevant to the hypotheses, revise their ideas and try again. The classroom climate then becomes one of negotiation and willingness to modify one's ideas based on available facts.



3. The use of facts as evidence.

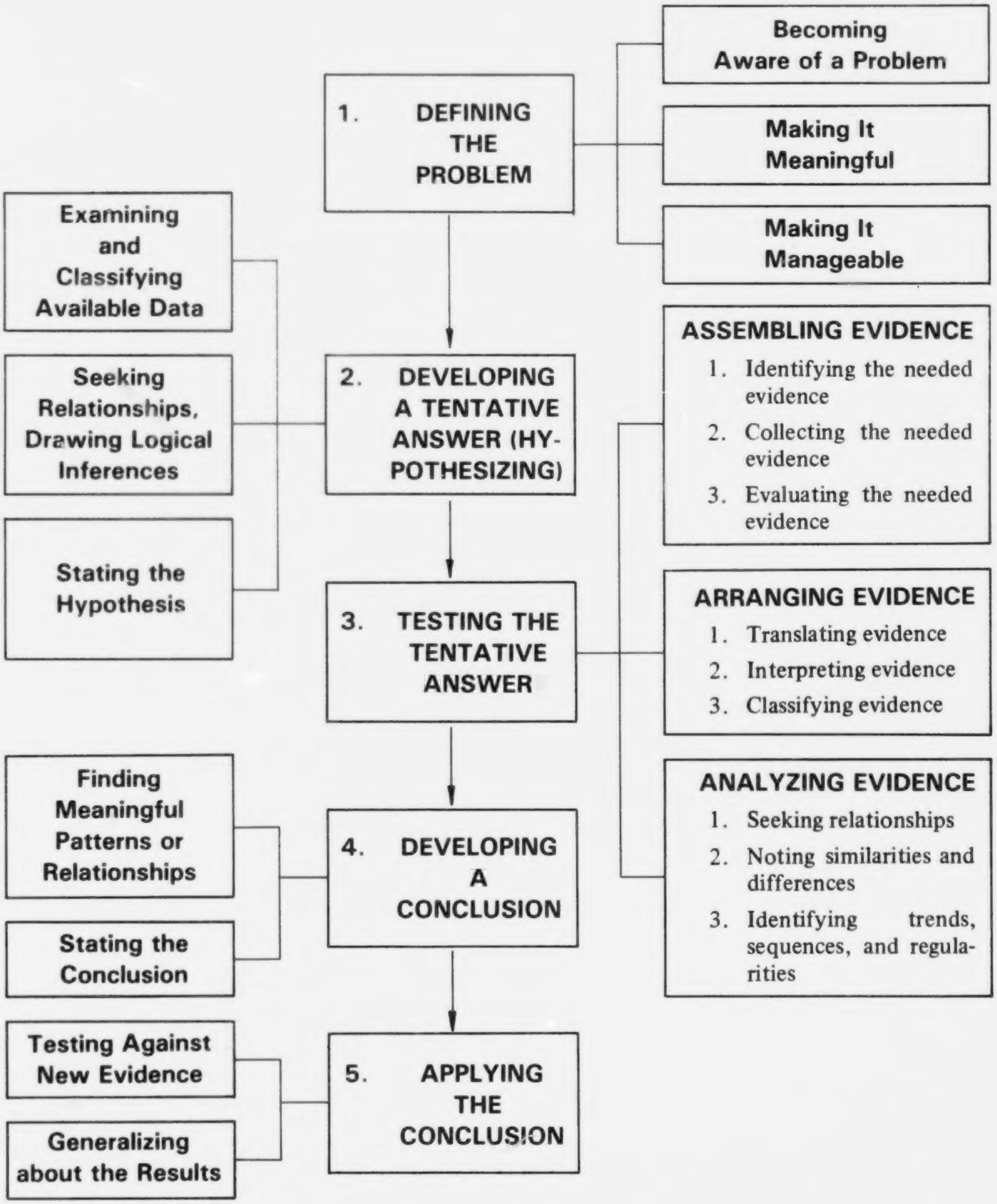
The validity and reality of facts are given as much consideration as the testing of the hypotheses. Inquiry demands that facts be validated if they are to be used as evidence.

What is the primary goal of the inquiry approach?

The primary goal of the inquiry approach, according to one prominent author, is "to provide the students a sense of efficacy, i.e. the belief that they have the skills to look critically at their environment and, to a large measure, control their own destiny and influence the decisions affecting them." This involves more than simply knowing where to get the needed information. It requires also an attitude of curiosity, the ability to analyse a problem, and the ability to use information in validating the conclusion. Thus, simply put, the inquiry approach aims at developing in the learners those skills and attitudes that will enable them to think critically and, in effect, to become independent problem solvers. If the learners, young as they are, are trained to recognize problems in their environment, to formulate and test ideas for a solution, hopefully, they will grow into adults who will become critical thinkers and good problem solvers.

Two models of the inquiry approach

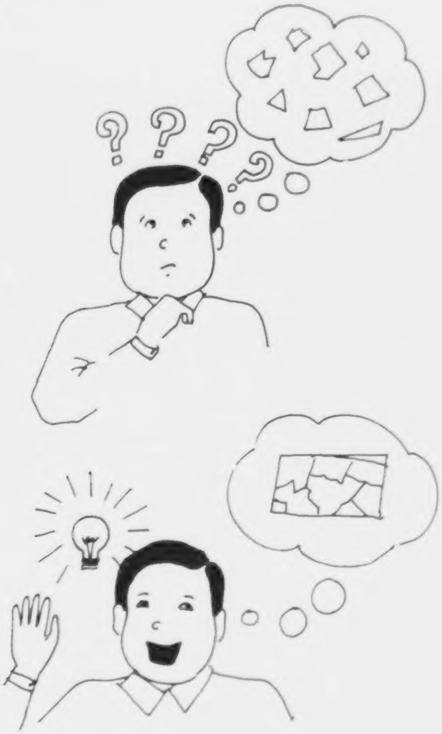
I. First model: process for teaching a moral dilemma, by Ronald Galbraith and Thomas M. Jones


1. DEFINING THE PROBLEM
Becoming Aware of a Problem
Making It Meaningful
Making It Manageable
Examining and Classifying Available Data
Seeking Relationships, Drawing Logical Inferences
Stating the Hypothesis
2. DEVELOPING A TENTATIVE ANSWER (HYPOTHESIZING)
ASSEMBLING EVIDENCE
1. Identifying the needed evidence
2. Collecting the needed evidence
3. Evaluating the needed evidence
3. TESTING THE TENTATIVE ANSWER
ARRANGING EVIDENCE
1. Translating evidence
2. Interpreting evidence
3. Classifying evidence
ANALYZING EVIDENCE
1. Seeking relationships
2. Noting similarities and differences
3. Identifying trends, sequences, and regularities
Finding Meaningful Patterns or Relationships
Stating the Conclusion
4. DEVELOPING A CONCLUSION
Testing Against New Evidence
Generalizing about the Results
5. APPLYING THE CONCLUSION

II. Second model

A. Recognizing and stating the problem

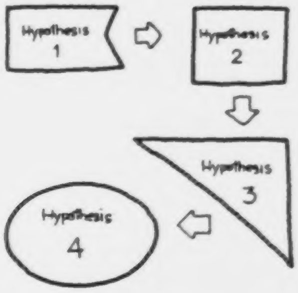
The inquiry approach assumes that real learning starts with a confusion, puzzle, dilemma or problem bothering the learners, if not blocking their goals in life. An important thing to remember is to state the questions/problems not only in explicit and precise terms but, perhaps more crucially, in researchable forms. Some examples of such statements of problems follow:



1. How does the population situation affect quality of life? Specific questions/problems could be the following:
   - a) How does rapid population growth (i.e. high fertility rate + low mortality rate, assuming migration in and out = 0) affect social services (health, housing, education), food and nutrition, environment/resources and employment?
   - b) How does population composition (e.g. young age population) affect socio-economic development?
   - c) How does migration (e.g. rapid urbanization) affect standard of living?
2. How do researches on human reproduction or sex education improve the quality of human life?
3. How do family planning programmes affect quality of life?
4. How may population programmes such as population education, family planning and sex education enhance the quality of life in the family, community and the nation?

Note that the statements of the problems imply relationships between clusters of population concepts. There are two main variables in each statement. For instance, in problem number 1 (a) the independent variable is population growth rate, which causes change in another variable – the dependent variable, social services.

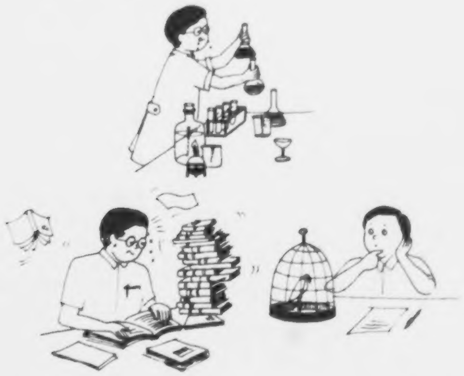
B. Formulating the hypothesis



This involves making educated guesses or proposing answers to the problem in the light of the learners' experiences or data available to them. A well-stated hypothesis can serve as a useful guide in the search for relevant data. For instance, one of the hypotheses for problem number 1 (a) is, "Rapid population growth tends to adversely affect the provision of social services (health, housing education)". This hypotheses delimits the initial thrust of the inquiry, especially when an *if . . . then* proposition is laid down. If a *condition* of rapid population growth exists *then* adverse effects on social services are a likely consequence.

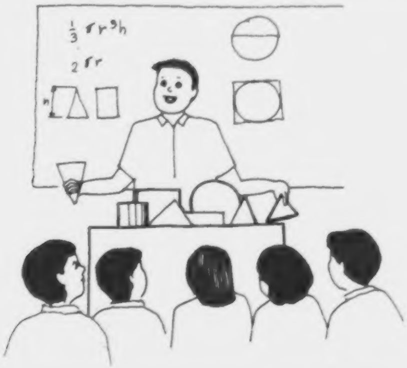
The hypothesis is usually expressed in the form of a statement of relationship between two or more sets of events or phenomena.

C. Gathering data



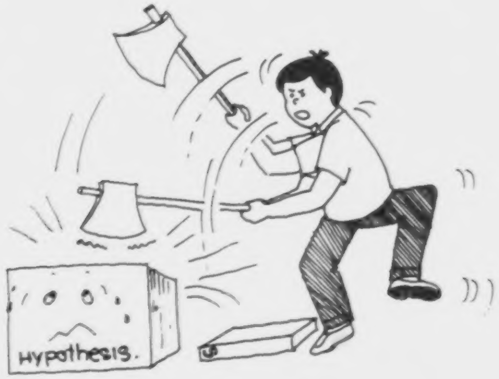
After formulating the hypothesis or stating a position, the students are now ready to gather relevant data that will support or refute the hypothesis. To support the hypothesis for problem 1 (a), two sets of data are needed, namely (i) evidence that when population growth rate is high the provision of social services is adversely affected, and (ii) evidence that when the population growth rate is low the provision of social services is enhanced. There are a number of ways to obtain the data, such as through survey, case studies and documentary analysis.

D. Reporting data/findings



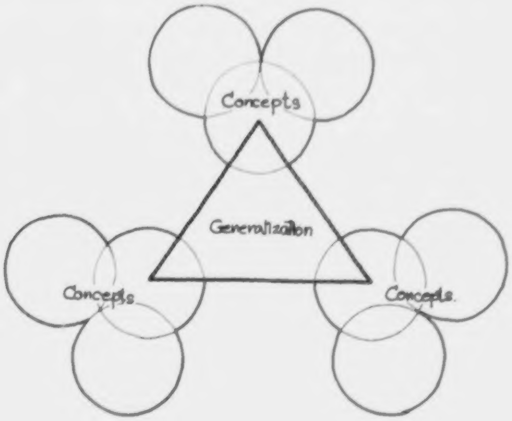
Students' findings may be reported to the class in various forms, such as (a) an oral report; (b) panel discussion; (c) debate; (d) use of resource persons; (e) dramatization; or (f) role-playing. Following the presentation, the class discuss and analyse the information they heard. The students also attempt to ascertain the validity and reliability of the information by asking questions such as: did the group consult several sources? Did the group report present both the findings that supported and did not support the hypothesis?

E. Testing the hypothesis



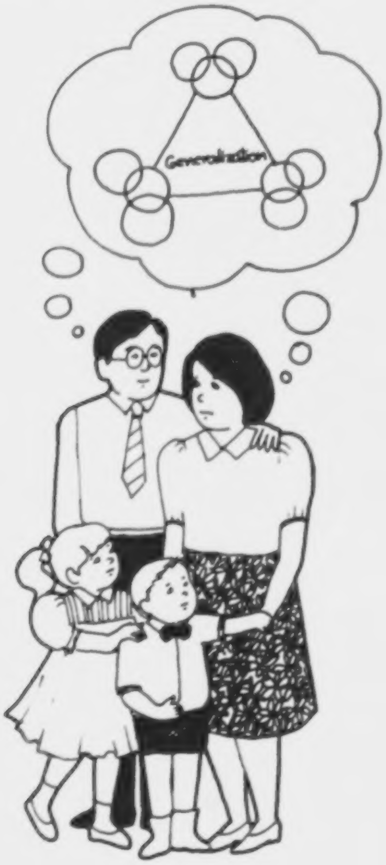
To test the hypothesis, the problem and the hypothesis are written on the board. A problem is read as well as each of the hypotheses for that problem. Those hypotheses which are supported by adequate evidence are checked and accepted. Those which are not, are crossed out or may be studied further.

F. Formulating the concepts and generalizations/conclusions



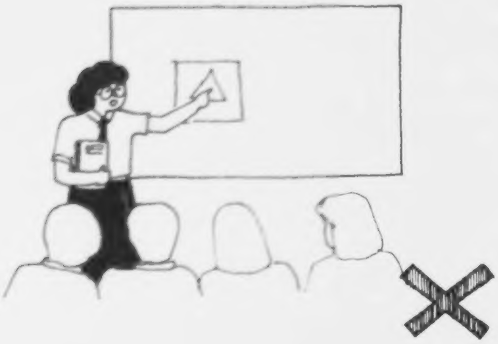
From the list of concepts formulated, the students will combine or summarize the concepts by stating the relationships between two or more concepts. This statement of relationship which universally applies to a class of phenomenon is called the generalization. Although the generalization is supported by much evidence, it should not be considered as a final truth but as tentative and subject to change. If the hypothesis is confirmed, then the conclusion is a mere re-statement of the hypothesis, i.e., "Rapid population growth tends to adversely affect the provision of social services."

G. Stating one's commitment or applying the conclusions



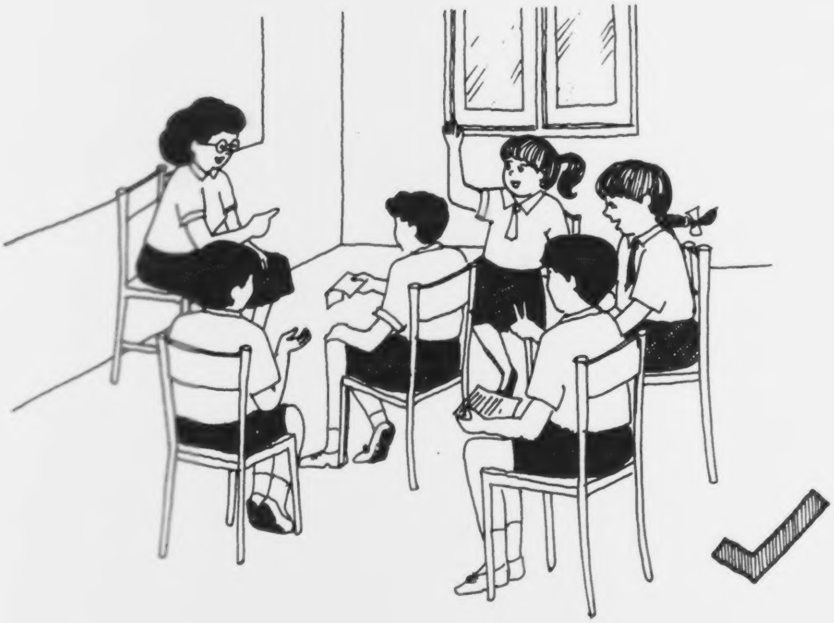
Here, the students resolve to apply the solution in their own lives, which leads them to new experiences. Some lessons may end up with students making a commitment to apply new learning in the present. Others, however, may culminate with positions on or verbalized attitudes toward new knowledge or skills learned. The reason is that some knowledge learned can be applied only at some future time in their lives.

Some outstanding characteristics of the inquiry approach

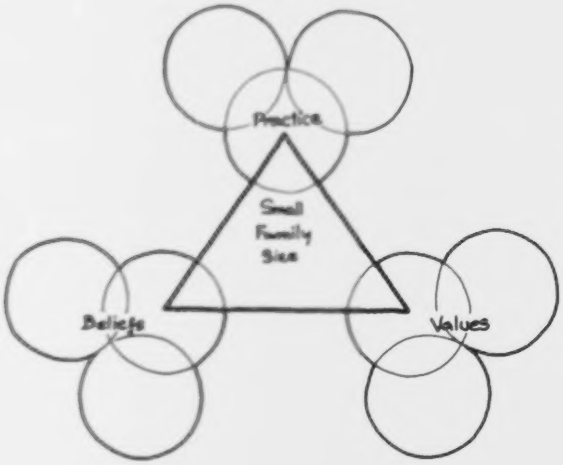


1. ***It is process rather than content-oriented.***

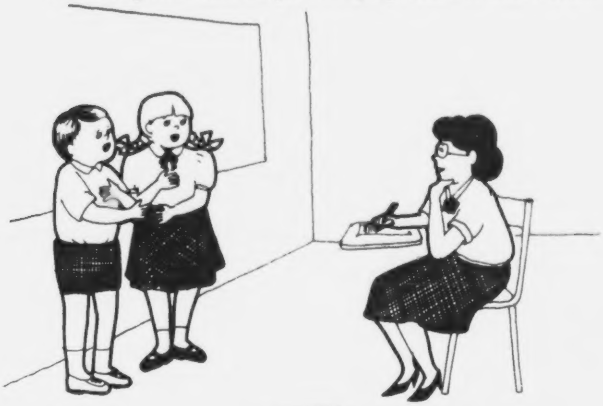
The inquiry approach gives emphasis to process outcomes. In other words, in addition to the knowledge and skills the students acquire, they also gain experience that help them learn how to learn. For example, instead of listening to a lecture on the advantages and disadvantages of having few children, the students themselves are guided to probe the issue of family size.

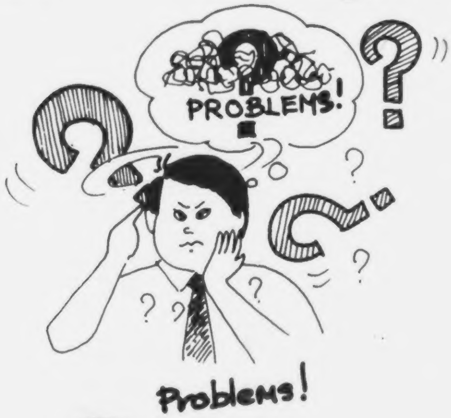


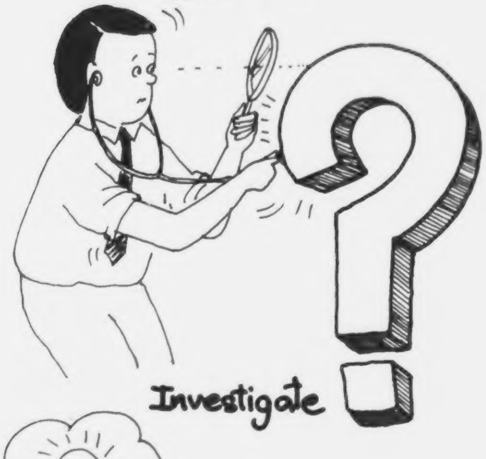
2. ***It is conceptual instead of factual.***

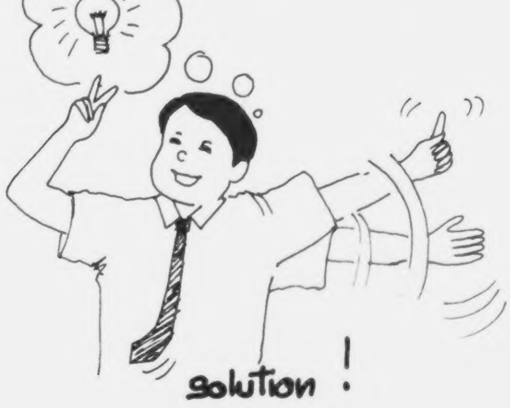


In the inquiry approach the content emphasis is on concepts and generalizations. Whereas the content in the expository method is a narrative and descriptive account of events, the content in the inquiry approach is built around basic concepts and generalizations. Instead of simply enumerating the beliefs, sayings, songs, and practices which reflect values concerning family size, students investigate the beliefs, practices, songs, and sayings in their own communities that favour a large family. Afterwards, they analyse what they have gathered according to a set of criteria which they themselves have evolved.




PROBLEMS!
Problems!





3. ***It is student-centred***

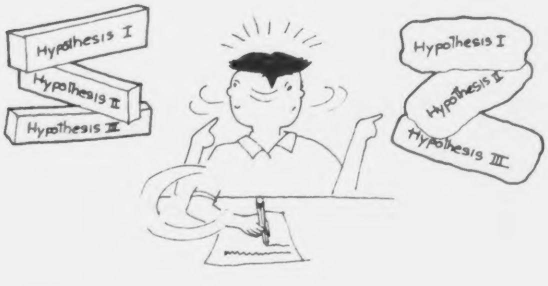
The student plays a much bigger role in the inquiry approach than in the expository approach. He works co-operatively with the teacher in exploring the various aspects of the problem instead of merely listening to the teacher tell about it. The student does the actual investigating or data collecting, while the teacher serves as a facilitator providing assistance only when required.

4. ***It is active***

The inquiry approach views the student not as a passive receiver of information but as an active receiver who is thinking, seeking, discovering, reorganizing and testing data from his environment. The student actively participates in the entire learning sequence – from the statement of the problem to the drawing up of a conclusion. In this process, he is trained to become not only an independent learner but a critical thinker as well.

5. ***It uses content not as an end in itself but rather as a means to attain other important purposes.***

In the inquiry approach, as the student seeks answers to a problem, the processes he goes through help to develop his learning skills. He becomes more critical. He learns to probe issues, to analyse and to discriminate, and to make decisions on alternatives.



6. It is more effective than the traditional expository approach in terms of bringing about learning, retention, and transfer of knowledge; in stimulating critical thinking and more active participation and in developing in students a favourable attitude towards the subject matter and towards the teacher.

7. The effectiveness of the discovery approach depends to some extent on teacher and student competence, administrative support, compatibility of teaching methods to the content and on the general cultural and social environment.

Guidelines for teachers

A teacher using the inquiry approach plays different roles, which range from planner, designer, librarian-collector, facilitator, challenger, judge, and manager to evaluator. Some of these roles are discussed below.

1. **As planner.** Guided by the objectives to be achieved, your role as a planner is to plan learning activities on a broad range, well ahead of time. As a planner, you (a) design the lessons so as to involve significant concepts/problems which can be explored and investigated at many levels of sophistication; (b) prepare a broad range of alternative ideas/values which students may raise as related to the concept being discussed; (c) collect and prepare classroom materials and learning experiences that may serve as springboards for discussion; (d) make available to the students a wide variety of resources and materials; (e) allot adequate time for these activities; and (f) plan skill building exercises which are directly related to the on-going learning activities.
2. **As introducer.** As an introducer, you introduce a lesson with use of materials, such as pictures, graphs and other visual aids. The introductory lesson could be a presentation of an unfinished story, where you deliberately withhold information about the resolution in order to create a problematic situation and to challenge the students to develop their own ideas. At times, the student may be asked to relate his own experiences or readings, which may serve as a springboard for discussion. You encourage many different responses from the students and are prepared to deal with *alternative* patterns of exploration.
3. **As questioner and sustainer of inquiry.** The teacher does not put on a "know it all" attitude, but that of a fellow inquirer who has no absolute answers to give, because she believes that knowledge keeps on changing. In this role, you guide and prompt students to think and discuss rather than to give answers. You conduct the lesson in such a manner that the students feel free to ask questions and express their

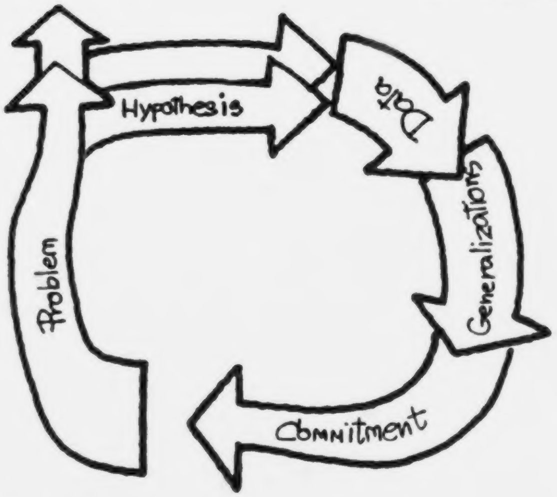
ideas. In asking questions or making statements you use the ideas or questions raised by the students. You entertain questions of students but as a matter of strategy you redirect their questions in such a way that they are encouraged to arrive at their own ideas. You conduct open-ended discussions to provoke students to respond. To keep the inquiry process going, you are ready to suggest a new direction of inquiry when a deadlock is reached.

4. **As manager.** The teacher cannot escape routine classroom management, such as making announcements, maintaining reasonable order, and recognizing students. But while you maintain reasonable order, you also allow flexible seating and student movement. You see to it that courtesy and willingness to listen to each other's ideas are observed. To promote a balance in participation, you encourage the shy students to participate more actively in the class discussions. But more important is your managerial function of using all available concepts, techniques, and data sources to engage students in planning and executing inquiries of their own.
5. **As rewarder.** The teacher gives recognition to whomever recognition is due. Each student's contribution in the learning situation is considered legitimate and important. In contrast to the practice of the traditional teacher who "cuts down" students for offering simple guesses or suggestions, you praise the students for their creative thoughts and imagination. You encourage as well as reward the free exchange and testing of ideas, for it is this process that promotes a higher level of motivation and wider student participation.
6. **As value investigator.** Before discussing value-laden questions or concepts, emphasize to the students that values, like concepts and social issues, are legitimate areas for discussion. Values, of course, are not taught but rather critically examined by both students and teachers. However, in discussing values, see to it that unfounded and emotionally charged language are avoided. You emphasize that there is no one single right answer to the value questions. There is bound to be a diversity of values and attitudes because these are influenced by personal as well as social factors. You also encourage the students to explore the implications of holding alternative value positions. You, likewise, remind them that in choosing a value position the students should choose one which they really understand and can defend in public.

   You may eventually have to take a value position on a particular issue but be sure to give it only after the students have stated their own positions.
7. **As formative evaluator.** You are a formative rather than a summative evaluator. You utilize the results of formative tests to get reliable feedback on the learning situation and classroom climate, in order to be able to make appropriate adjustments; this will further improve your style of teaching.

SAMPLE LESSONS ON INQUIRY/DISCOVERY APPROACH

INQUIRY APPROACH ON DETERMINANTS OF FAMILY SIZE



Objectives:

The student should be able to:

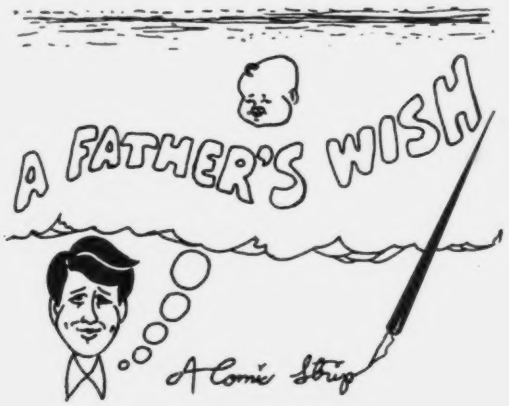
1. Understand the various motivations for having children
2. Understand that parents' motivations for wanting children may affect family size
3. Differentiate between small and large families
4. Learn how family size is influenced by beliefs, customs, sayings, values and social practices.

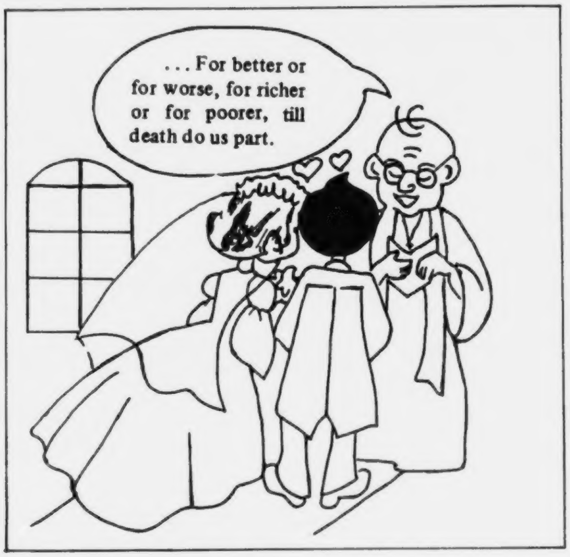
Procedures

1. Recognizing and stating the problem

After you have introduce the lesson, which may be by means of a story, graph presentation, or poem recitation by a member of the class, students become aware that a problem has arisen and are stimulated to study more about it. Through skillful questioning you guide the students to state the problem in a meaningful and manageable way. You may ask such guide questions as: What do you want to find out? Do you perceive a potential problem in the poem/story we have just heard? Can you state the problem? Encourage as many problem statements as possible and have them written on the board to enable the students to study them further until they are able to state the problems in a way that is acceptable to the whole class. You may ask follow-up questions such as: Why do you want to know this? How will solving this problem help us?

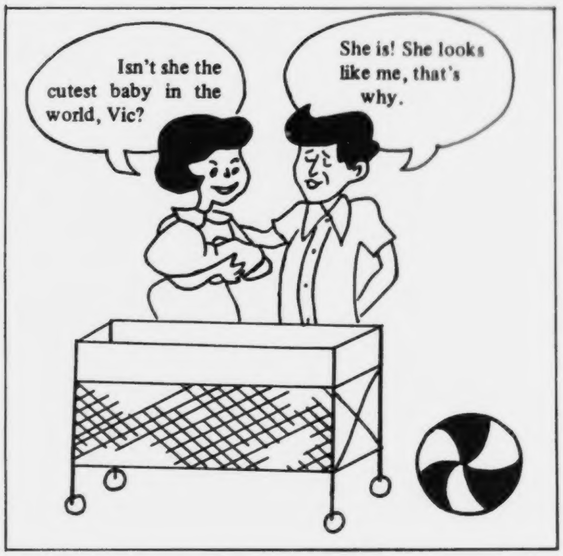
Let us see how you will apply the first step of the inquiry approach in the subunit on "Determinants of family size". As a subunit opener, present the comic strip roll, "A father's wish".




. . . For better or for worse, for richer or for poorer, till death do us part.

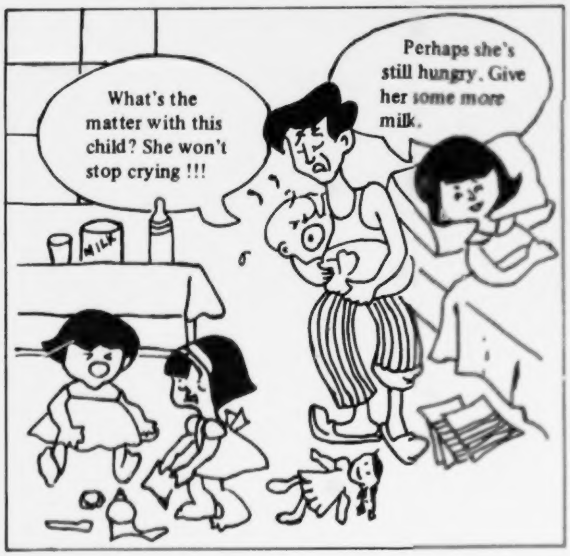
1

It's a fine June morning. Vicente Santos takes Mila Cruz as his beloved bride.


Isn't she the cutest baby in the world, Vic?
She is! She looks like me, that's why.

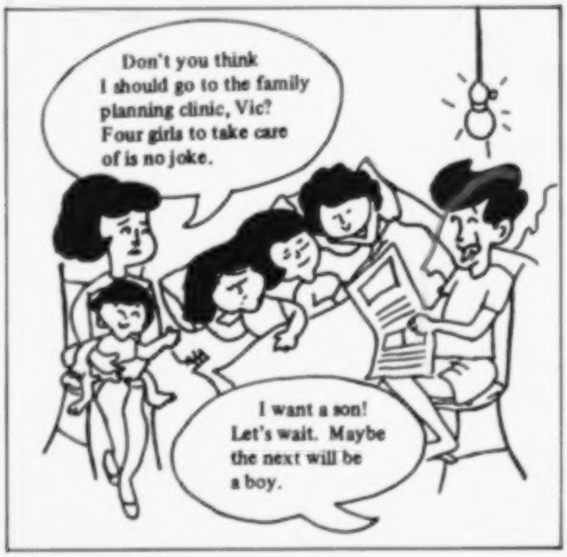
2

On their first wedding anniversary they have little Nora. They are very happy although Vicente had hoped for a son.


What's the matter with this child? She won't stop crying !!!
Perhaps she's still hungry. Give her some more milk.
MILK

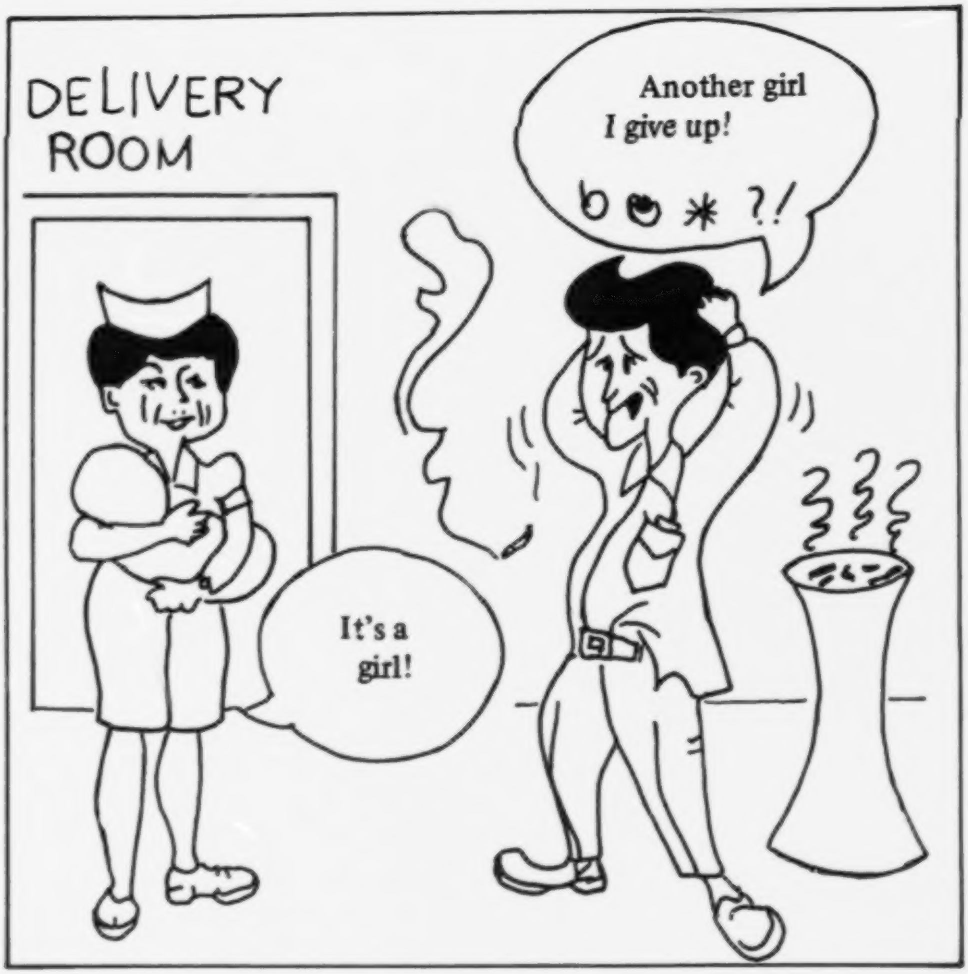
3

After five years and three daughters, the Santoses are not so happy. Another baby is coming.


Don't you think I should go to the family planning clinic, Vic? Four girls to take care of is no joke.
I want a son! Let's wait. Maybe the next will be a boy.

4

One evening, Mila talks to Vic about family planning. She wants to go to the family planning clinic, but Vic stops her.


DELIVERY ROOM
Another girl I give up! ?!
It's a girl!

5

So what happens? Mila has another child. Imagine Vic's disappointment the baby is another girl.

Questions:

a) What was the problem of Mila and Vic after five years of marriage?

b) Was it natural for Vic to wish for a son after having had three daughters in a row?

c) Do you know of couples in your community who keep on having children because they are after a son or a daughter?

d) Is this reason for wanting children common?

e) What other motivations do parents have for wanting children?

f) What would you like to find out in our next series of lessons?

g) Who can state our problem?

The series of questions above should lead the students to state a problem or a number of problems, like:

a) What are the reasons for having children?

b) Why do Asians in general have large families?

The statement of the problem or problems are written on the blackboard for everyone to consider. Encourage the students to agree as to how the problem should be stated so that it is clearly understood by everyone. Ask several students to read the problem aloud:

Why do Asians in general have large families?

2. Formulating the hypotheses

Here, you will encourage the students to give possible explanations or solutions to the problem. Different techniques may be used. You may ask the students individually to give his or her suggestion to solve the problem or the class may be divided into groups and each group will come up with a potential solution. All suggestions or ideas are accepted and are written on the board. Together with the students you study the list and test each suggested answer for the following: (a) its validity as an explanation of the introductory episode; (b) compatibility with previously discussed generalizations and experiences of the students; and (c) availability of evidence which is relevant to its proof or disproof. Through the process of elimination of tentative answers, a hypothesis or consistent theory is arrived at. In some cases, instead of forming a hypothesis, the students form a position, expressing their views on the problem.

To formulate a hypothesis for the problem: "Why do Asians generally have large families?" you may make use of discussion sessions. Divide the class into discussion groups of 5 to 6 members. With each group led by a chairperson, ask each group to discuss tentative answers to the problem.

You may need to ask follow-up questions to help bring out other facets of the problem and to assist the students in formulating hypotheses. You may need to ask these questions.

a) Would you say that motivations for having children affect family sizes?;

b) Do they make our family size large or small?;

c) Does family size affect the population size of the town? the province? the country?;

d) Do we have beliefs, customs, sayings, or songs as a people which reflect our belief that a large family size is good? Would you like to find out what these are?;

e) Let us examine our government policies and social practices. Do they favour small or large family size?

Hopefully, the students should be able to state a number of hypotheses regarding the problem, such as:

a) Our parents may have motivations for wanting children;

b) Parent's motivations for wanting children may affect family size;

c) Some customs, beliefs, and sayings favour large family size;

d) Our family size norms may have been influenced by beliefs, customs or sayings;

e) Our government used to promote a large family size. Now, it has started to promote a small family size;

f) Large family size may affect the population of our town, province and country; and

g) Some practices in our society may promote the large family size.

Or, the students may take a position with regard to the problem, for example:

a) The large family size is no longer realistic in our times; or

b) We need to re-examine certain Filipino beliefs, customs, practices, and sayings that favour large family size, instead of readily accepting them without question.

3. Gathering data

After formulating hypotheses or stating a position, the students are now ready to gather relevant data that will support or refute the hypotheses. You may ask the following questions to guide the students:

a) How do you find out if our tentative answers are right or not?

b) Where can we go to gather data to support our answers?

c) Any suggestions on how to gather data?

d) Should we divide the class into groups and assign one problem for each group or shall we call on volunteers?

You may need to inform the students that they can utilize the class period for library research and that you will be there to give assistance when and if needed. The number of days for data gathering will depend on the rate at which the students work and on the availability of reference materials and the strategy for data gathering (field trips, use of resource persons, interviews).

Going back to our illustration, you may lead students to conduct a small survey of some family heads in their community concerning motivations for having children. In this case, students may need assistance in planning and conducting the survey, including how to formulate survey questions, how to interview, and how to organize and interpret data gathered.

It would be a good idea to have all groups of students report on how they will gather data to validate the hypotheses formulated. This is one way of generating as well as sharing ideas on how to gather relevant data.

While students gather data, you stand by, ready to give assistance in planning and executing various activities to groups and individual students whenever your help is sought.

In fact, you may require the various groups to give you a progress report periodically on data gathering. This way you are able to monitor progress as well as accuracy of data being gathered. You will also be able to give suggestions for further research and be able to check interpretation of findings.

During this stage, as groups report on the progress of their work, you can start asking how the various groups plan to report findings to the class. You can elicit suggestions on strategies for reporting or lead them to choose appropriate strategies.

4. Reporting data/findings

Students' findings may be reported to the class in various forms, such as: (a) oral report; (b) panel discussion; (c) debate; (d) use of resource persons; (e) dramatization; or (f) role playing.

Following the presentation of each group report, the class discusses and analyses the information they heard. With your guidance, the students attempt to ascertain the validity and reliability of the information by asking questions such as:

a) Did the group consult several sources?;

b) Were authorities consulted and, if so, what were their qualifications?;

c) Did the group report attempt to present findings that supported the hypothesis?

5. Testing the hypotheses

To test the hypotheses, the problem and the hypotheses are written on the board. A problem is read as well as each of the hypotheses for that problem. Those problems which are supported by adequate evidence are checked and accepted. Those which are not, are crossed out or may be studied further.

In our illustration, the students will agree that all of the seven hypotheses (a-g) are adequately supported by facts/evidences, in which case they will decide to accept all of them.

6. Formulating concepts and generalizations (conclusions)

The students, with your guidance, try to put together or combine the solutions listed on the board. From the list of concepts formulated, the students will combine or summarize the concepts by stating the relationships between two or more concepts. This statement of relationship which universally applies to a class of phenomenon, as we learned earlier, is called the generalization.

Again, in our illustration, the hypotheses may be adopted as concepts, related ideas, generalizations or conclusions.

Before asking the students to formulate a generalization they may be led to recall the hypotheses or important ideas learned in the unit.

They may state the following:

a) There are motivations in wanting children;

b) Our customs, beliefs, sayings practices and customs affect our family size and the population of the country;

c) We should be critical towards our beliefs, sayings, practices and customs. We should examine them instead of readily accepting everything;

d) Our government policies and social practices influence family size. Then, you may continue as follows:

Let us make one big statement to summarize all of the above ideas.'' Perhaps you may ask this question to guide them: ''As a citizen, what can you do about the population situation of your country?''

The following statements are possible answers:

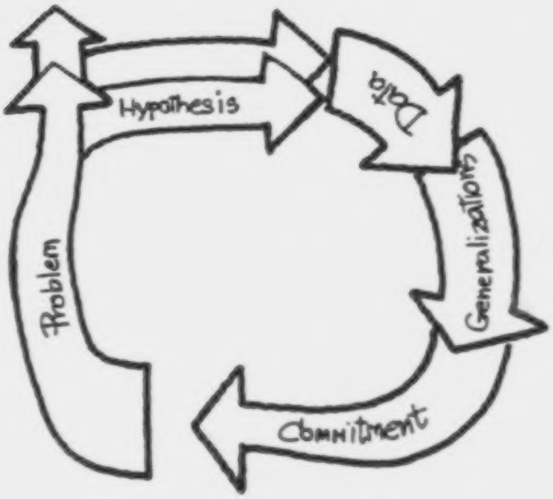
''Citizens have roles to play in choosing a desirable family size. They should be critical about some beliefs, customs, sayings and practices that affect family size, and which also affect the population situation of a country.''

7. Stating one's commitment

Here, you guide the students so that they may resolve to apply the solution in their own lives. Some lessons may end up with students making a commitment to apply new learning in their present lives. Others, however, may culminate with positions on or verbalized attitudes toward new knowledges or skills learned. The reason is that some knowledges learned can be applied only at some future time in their lives. For example, in our sample lesson, the students may be encouraged to express their attitudes toward family size or to state their position on Filipino customs, beliefs, practices, sayings, or folk songs which favour the large family size.

Excerpted from: Population Education Programme. *Module on the inquiry approach in the teaching of population education.* Manila: Ministry of Education, Culture & Sports, 1984, p. 11-15.

EFFECTS OF FAMILY SIZE, PARITY AND SPACING ON HEALTH



Objectives

The student should be able to:

1. Explain how family size, parity, and spacing of children affect family resources and health.
2. Show the relation of family size to child and parental morbidity.
3. Explain how parity and spacing affect the physical and emotional health of the mother and the child.
4. State generalizations regarding the effects of family size, parity, and spacing on the family resources and health.
5. Come up with a plan for a desirable family size.

Procedures

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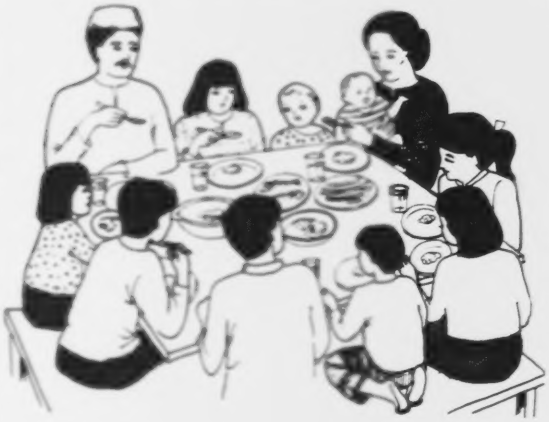
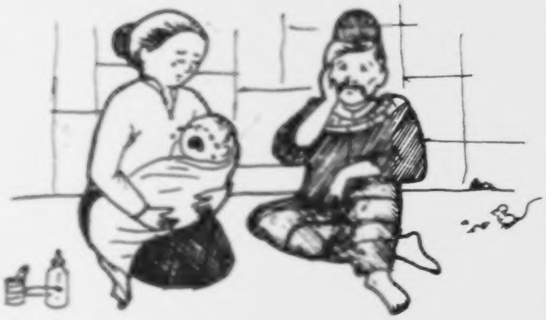
1. Present two skits as a springboard for discussion

Skit No. 1
Births Unlimited
(Family A)

Characters:

Father
Mother (Soraida)
Children:
Amina – 14 years old
Ali – 13 years old
Samira – 12 years old
Abdul – 10 years old
Mariam – 8 years old
Omar – 5 years old
Potre – 3 years old
Nasser – 1 year old
Kadidia – a relative





Scene: Amina, the eldest child, is preening herself in front of the mirror. Abdul is feeding the chicken. Omar is fetching water. Mother is weaving cloth, while Mariam looks on. Potre is playing with Nasser near their mother. The father and Ali arrive from the sea.

Father: Soraida! We're home!

Mother: (Leaves her work and meets the husband.) And about time, too. We have been waiting for you. We have no meat for supper. It is a good thing you have some catch. (Calls Kadidia.) Kadidia, get the fish and cook it for supper.

Father: Where is Amina?

Morther: Don't you hear the Kulintang*? She is the one playing it.

Father: Our daughters are getting prettier every day. In a few months, we can tell Sheik Bashier that Amina has reached puberty and is ready for marriage. We can then make the announcement to inform our relatives and friends. I could sense that Sheik Amid is interested to have Amina for a daughter-in-law. With Amina married, Samira will soon have her turn.

Mother: Let's talk about that later. Rest first while I cook supper. (Soraida goes to the kitchen).

Kadidia: (Calls everybody). Children, Let's eat supper now.

Amina: (Looks at the food on the table.) Wow! That smells good. (Takes a sampling.) This is delicious.

Samira: If we have this everyday, I shall gain weight.

Ali: (Already eating.) Mother, could I have some more?

Abdul: Me, too, mother. (Looks at his plate.) This is not enough for me.

Omar: Me, too. I'm still hungry.

Mother: That is enough. It is not good to sleep on a full stomach. (Omar cries.) Don't cry. Here, take mine. (Gives her share to Omar).

Mariam: Just get plenty of broth. It is delicious and good with rice.

Amina: Mother, please eat now. Let Omar eat by himself.

Abdul: And what will she eat? She gave Omar her share of the fish.

Ali: Omar ate it all. He has a big appetite tonight.

Father: Soraida, you are losing weight.

Morther: Yes, I know. I can't help it. What with all the problems here at home. Food is not enough. No rice in the bin. Amina needs clothes and Ali some new pants. There are many, many more things that this family needs.

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* Local musical instrument – a series of gongs of different pitches.

Omar: Father, our neighbours have so much food. It is more than enough for them. Why is it so?

Father: You know, Kasim bought a motor boat. He uses it to fish in the open sea where he catches plenty of fish, big and small. Now he supplies our market with fish. If we could buy a motor boat like his, I am sure our catch would be plentiful. We will have to save to buy a boat like it.

Mother: But how can we save? Our earnings are not even enough for our daily needs. (Samira leaves the table.)

Samira: Mother, Nasser is crying. He seems feverish.

Mother: (Worried) Please see if there is any medicine on the shelf. I noticed that he was not in the mood to play with Potre earlier on.

Samira: Mother, all the medicine's gone. I sold the empty bottles only this morning.

Father: Take him to Dr. Tawano.

Mother: How can I go back to him? I haven't yet paid him for Potre's medicine when she got sick last week. (Takes a deep breath.) Expenses here and there. How will we ever be able to get out of this impecunious situation?

Ali: Don't worry mother. Abdul is grown-up already. He can help father fish. I will go to Sheik Rasid. He might be able to give me work in his transportation business. By helping each other, we will get by. (Mother goes to the kitchen. Father follows her.)

Father: Soraida, don't despair. Our children are Allah's blessings and He will help us provide for them. We'll win over all these difficulties yet. You'll see.

Mother: Yes, but how long do we have to suffer still? (Crying, she goes to the bedroom. Father follows her.)

The Family of Four
(Family B)

Characters:

Father : Ismael
Mother : Fatima
Daughter : Silpha, 14 years old
Son : Nasser, 12 years old

Scene: Mother is at her loom by the window weaving cloth for a malong.* Father, in denim pants and white shirt, is sitting on the sofa with Nasser.

Father: Fatima, where is Silpha?

Mother: She asked permission to visit her friend Norsida. Here she comes now. (Silpha arrives, greets the father, kisses the hand of the mother and pats Nasser on the shoulder.)

Father: (A little cross) Silpha, where have you been?

Mother: From Norsida's place, Father.

Father: Your visit must have been important. What took you so long? Look at the time! It is almost 12:00 o'clock now. Your mother has already finished cooking. It is likely that you friend has not been able to help her mother because you were there. Next time, finish your household chores before you go visiting friends. Remember that your friend also has work to do.

---

* Sarong

Silpha: Yes, Father, I'll remember. Sorry, Mother, for staying out so long. What do we have for lunch?

Mother: We have broiled fish and sea weed salad with cassava cake (plyutu). Set the table for me, will you?

Father: Let's eat now. I am hungry. (Goes to the table.)

Silpha: Mother, Hariraya will be next month. Norsida is going to town to buy a new dress. Will I have a new dress, too?

Mother: Oh, yes, I almost forgot the Hariraya. What shall we prepare?

Silpha: That I know, Mother. Let us cook delicious rice cakes like tinatag, amek, and Kyunin. Wow! Superb!

Mother: All right. We'll make them together. By the way, Ismael, market day will be the day after tomorrow. I will take Silpha and Nasser shopping as they need new shoes and clothes.

Father: There are a few things we have to fix in the house before the Hariraya.

Nasser: Father, I will help you put up the streamers around the house.

Silpha: I will take care of decorating the interior of the house.

Father: There is a broken part in the roof I have to fix. Besides, your Mother wants a clothes closet and a couple of kitchen cabinets.

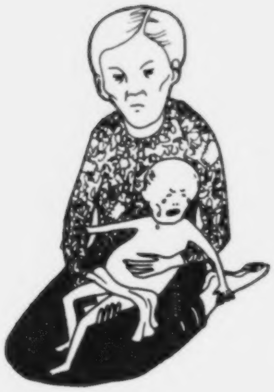
Silpha and Nasser: Great! We're sure our house will be beautiful by Hariraya time.

2. Recognizing and stating the problem

a) Assuming that both mothers in the two skits have the same management skills, why do you think the mother of Family B can manage the family resources (time, money, and human) better than the mother of Family A? How does family size affect the management of family resources, and thus, family health?

b) Comment on the health of the different members of Family A. Why are the younger children sickly? Are they getting the care and attention they need and deserve? Justify your answer.

c) Describe the spacing of children in Family A. What about Family B? What is the effect of spacing on the health of family members? What do you think would be a reasonable length of spacing between children to safeguard the health of family members, especially the mother?



d) What is your reaction to the statement of the father in Family A that, "they are God's blessings and He will help us provide for them?" Do you agree with him? Explain your answer.

e) State the problems conveyed by the skits you have just seen. How do family size, parity, and spacing of children affect the management of family resources and family health?

f) Do you know of situations in the community which are similar to the ones you have just seen? Say something more about the family you know.

3. Formulating the hypotheses

After discussing the problems posed in the skits, the students present the following hypotheses which explain the problems:

a) If a family is small, parity level is low; thus spacing is adequate.

b) If a family is large, parity is high; thus spacing is close.

c) The management of the family resources to attain good health will be easier if the family size is small, parity is low and spacing is reasonable.

d) The larger the size of the family, the higher the prevalence of parental and child morbidity.

e) Parents have better emotional and physical health if they are not overworked and worried over frequent births.

f) The higher the parity, the more sickly the children are likely to be.

g) The more births there are, the poorer the health of the mother becomes.

h) Spacing affects the health of the mother and child.

4. Gathering data

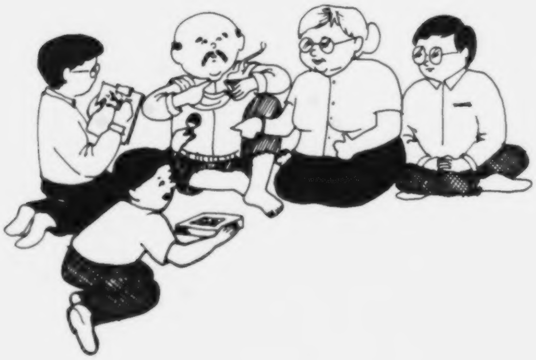
a) To gather data to provide in-depth discussion of the tentative answers, an interview should be conducted of several families in the community. The interview should include the following questions:

i) *Names of father and mother and their age, occupation and education attainment;*

ii) *Number of children, living and dead, aborted, miscarried, stillbirths;*

iii) *Number of years between births (spacing);*

iv) *If father or mother is dead, age and cause of death;*



v) Number of children who died before reaching five years;

vi) How often members of the family get sick;

vii) Who among the children often gets sick;

viii) Ailment most common among members of the family;

ix) Recreational activities engaged in by family members; and

x) Family atmosphere.

b) Draw a sketch of the layout of the community on the board and indicate which block will be assigned to each group of students. Instruct students on how to select the families to get a total of about 30-50 families. The number of families which each student will observe and interview will depend on the total number of members in the class. If there are 30 students and they go out in teams of two, two families may be assigned to each team.

c) Time for interviewing, preferably after class hours.

In places where there is difficulty in carrying out interviews of families, it is suggested that a PTA meeting be called so the teacher may inform the parents about the projected observation and interview.

d) Recording the results of the interview.

One member of the team may do the questioning and the other may record the answers of the interviewee.

e) Standards to observe during the interview.

Recall standards, if class has had previous experience in interviewing.

f) Define these terms, which may be used in the interview:

Family size
Parity
Morbidity
Fetus
Abortion
Spacing
Miscarriage
Stillbirth
Premature birth

g) Summarize the plan for observation and interview.

h) Optional assignment – If available in the community, student volunteers may interview health personnel such as the rural health doctor, nurse, or midwife regarding cases of morbidity of children and mothers, to corroborate the results of the interview.

5. Reporting data/findings

Guide the students to decide how they will report the results of their interview. Ask the class for suggestions on how to do the tallying of the results of their interview. The class may form five groups and select a leader for each group. The members of each group may use the suggested tally sheets for tallying the results obtained. When all groups have finished tallying, one of the leaders may report the summarized reports of all the groups to the class. This activity may take 40 minutes, after which the class may interpret the data gathered.

Under the teacher's guidance, the class interprets the data with the use of the following guidelines:

How many families belong to this classification?

Large-size family? ____________

Small-size family? ____________

How many families have high incidence of death among

	Large families?	***Small families?***
father	____________	____________
mother	____________	____________
children	____________	____________

How many families have high morbidity among

	Large families?	***Small families?***
low-parity level	____________	____________
high-parity level	____________	____________

How many families have close spacing and high morbidity among

	Large families?	***Small families?***
father	____________	____________
mothers	____________	____________
children of low parity	____________	____________
children of high parity	____________	____________

How many families have adequate spacing of births?

Large family? ____________

Small family? ____________

How many mothers died of childbirth among

Large families? ____________

Small families ____________

How many of the family members participate in recreational activities?

	Large families	*Small families?*
father	____________	____________
mother	____________	____________
children	____________	____________

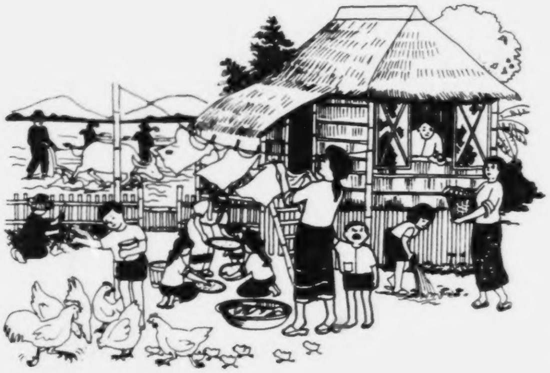
How many families would you consider to be enjoying themselves due to good health of the members?

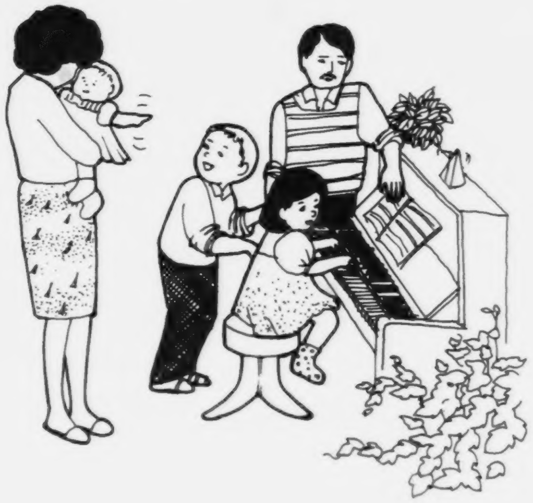
Large family? ____________

Small family? ____________

Report the result of the interview of health personnel. (Optional). Is there any relation between your findings and the data on the health of your town?

6. Interpreting the data





- *a) From your data, in what size of family do you find more incidence of parental morbidity? Of child morbidity? Of poor maternal health due to childbirth?*
- *b) Where do you find more cases of physically and emotionally healthy parents, where spacing is close or where it is adequate? Where do you find healthier children, where parity is high or where it is low?*
- *c) If there is adequate spacing, what is its effects on the mother's health? On the last child? On the father's health? On the health of the other children?*
- *d) Do you see a relationship between a family's participation in recreational activities and their use of resources? Which families have more time for recreational activities? Why do you think so?*

7. Testing the hypotheses

After presenting the findings, the class discusses and analyses the information presented to ascertain its utility and reliability. To do this, the following questions are asked:

a) Did the students systematically draw up a representative sample of families in the community to interview?

b) Was the interview conducted efficiently so that complete and reliable answers were extracted from the respondent?

c) Were the data tabulated accurately by means of statistical analysis?

d) Was the method for analysing the data reliable and accurate?

The teacher then leads the class to analyse each of the hypotheses in the light of the information presented. Throughout the reporting, the pupils look at the hypotheses written on the board and try to compare them with the information that was presented, to find out to what extent the information supported the hypotheses.

8. Formulating concepts and generalizations

In the light of the information presented, the students now decide whether to accept or reject their hypotheses or gather further information on the problems. In those cases for which they have sufficient information, they proceed to accept or reject the hypotheses one by one. Then, they formulate the following generalizations:

a) If a family is small, parity level is low; thus spacing is adequate.

b) If a family is large, parity is high; thus spacing is close.

c) The management of the family resources to attain good health will be easier if the family size is small, parity is low and spacing is reasonable.

d) The larger the size of the family, the higher the prevalence of parental and child morbidity.

e) Parents have better emotional and physical health if they are not overworked and worried over frequent birth.

f) The higher the parity, the more sickly the children are likely to be.

g) The more births there are, the poorer the health of the mother becomes.

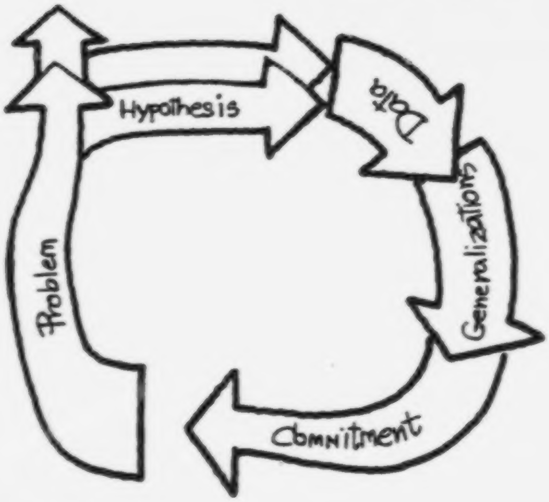
h) Spacing affects the health of the mother and child.

9. Stating one's commitment

The students may commit themselves to pass on the new knowledge they have just learned by explaining the harmful effects of frequent births on the health and well-being of parents and children.

Adapted from: Population Education Programme. *Teacher's guide in population education for homemaking arts (first year-second year).* Manila, Ministry of Education and Culture, 1981, p. 2-14.

SOME CONSEQUENCES OF RAPID POPULATION GROWTH ON COMMUNITY HEALTH



Objectives

The student should be able to:

1. Learn the different factors that cause population change
2. Pinpoint the harmful effects of rapid population growth on man's health and well-being
3. Understand what problems result from overcrowding in a community
4. Identify government policies and solutions to health and environmental problems caused by overpopulation

Procedures

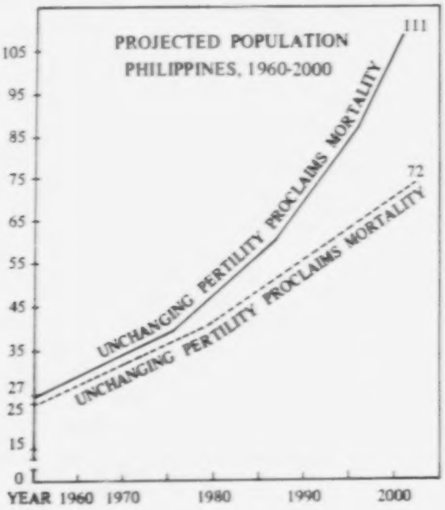
---

1. Recognizing and stating the problem

---

a) Present the chart on the "Projected Population, Philippines, 1960-2000" (see below) or a similar one for your own country. Explain that it is possible to estimate what the population of a country or a certain place is going to be at a certain time in the future. This is called population projection. These projections are made by demographers or experts who study population change through mathematical analysis of data on birth, death and migration rates over a period of time.

Ask the students, "To what year is population projected? There are two guesses as to what our population is going to be in the year 2000. What are they?"



The guesses are:

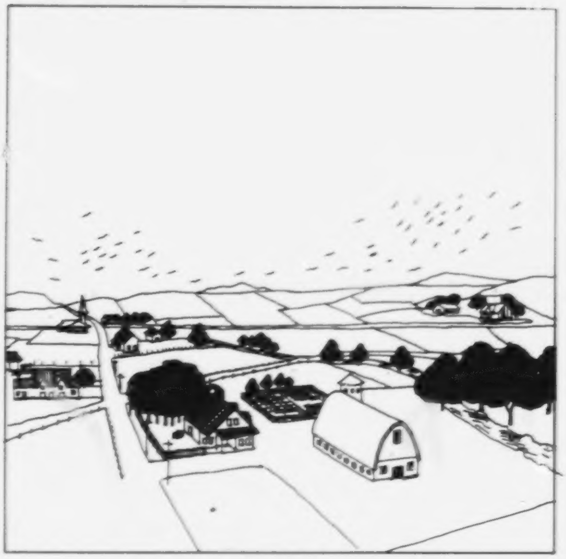
1) **If the present high birth rate and declining death rate continue, our population will be one-hundred, eleven million in the year 2000; or**
2) **If the birth rate decreases and the death rate continues to decline, our population will be 72 million.**

Questions:

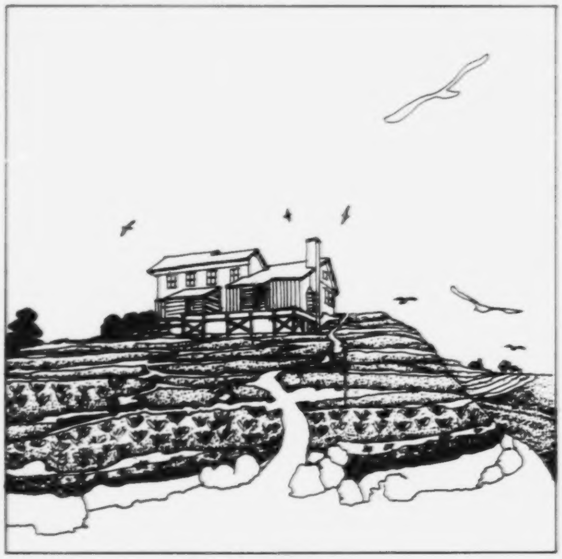
a) Do you think these projections about future population increase are also true for our town? In other words, do you think the population of our town is going to increase in the future?

b) Although it is true that the rate of population growth of 3.01 per cent in 1960 has gone down to 2.64 per cent today (1980), the present rate of population increase is still considered by demographers as rapid. We say that the Philippines has a rapid population growth (RPG).

c) Construct a model community indicating residential areas, rice fields, rivers, a market, a church, a hospital, a school, a playground, etc., with models. The houses have spacious yards where families plant fruit trees and vegetables. In the backyards there are pigpens and poultry houses. Ask pupils to talk about the community. Lead them to discuss the relationship between space and the number of people.



Community which is not crowded yet

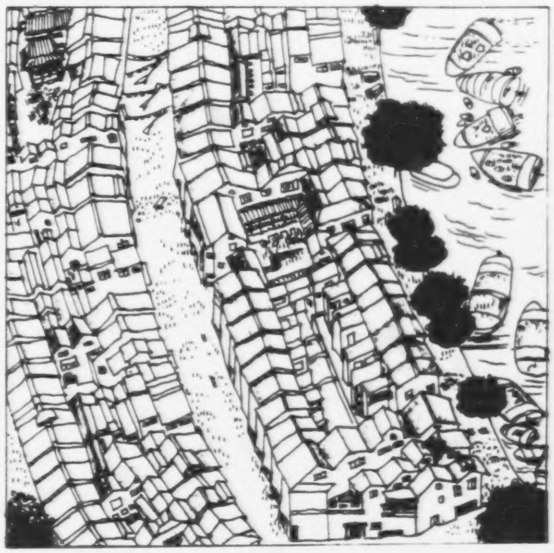


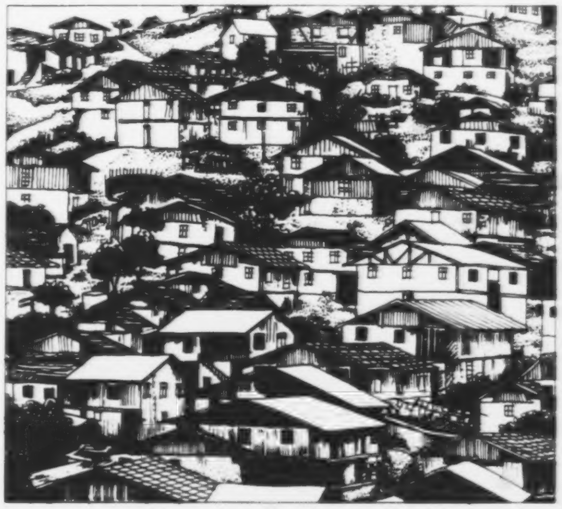
Spacious backyard

Then say:

After 25 years, the number of families in the community increased. Married children left their parents' homes and built their own houses in the vacant areas. (As the teacher narrates, he adds houses to the model community.) Families from neighbouring and far-off towns came to live here. Soon all the vacant spaces were filled with houses.

After many years, every vacant space was filled, including the backyards (add more houses). The houses now are built close to one another.





Ask questions to make the pupils aware of the problem – the effects of RPG (rapid population growth) on the community as well as on the health of the people. You may ask:

a) Why were more and more houses built in the community? What caused the population to grow? Can you say that this community has rapid population growth? Why?

b) If the population of the community increases at a moderate rate or slowly, will the people be affected? Why?/Why not?

c) If, on the other hand, the population grows rapidly and continues to grow, will the people living in this community be affected? If yes, how?

This series of questions may lead the students to state a problem or a number of problems, such as:

a) What are the effects of RPG on the community?

b) How does RPG affect the health and well-being of the people in the community?

Since this is a health education lesson, the teacher leads the class to decide to solve the second problem. She also informs the class that the other effects of RPG shall be taken up in social studies.

2. Formulating the hypotheses

To formulate a hypothesis/hypotheses for the problem: "How does RPG affect the health and well-being of the people in the community?", the class may be divided into several small groups and each group be given an article to read on the topic, "Effects of RPG" (the teacher provides the reading materials). Each group is asked to note down the effects of RPG mentioned in their respective reading materials. This task completed, each group recorder writes his group's list of findings on the blackboard while his group leader discusses/explains their list.

The list of tentative answers may be something like this:

1) **RPG may lead to food shortages and malnutrition.**
2) **Too many people living in a community may result in over-crowding.**
3) **Over-crowding may contribute to the spread of communicable diseases.**
4) **RPG may cause transportation problems.**
5) **RPG may make health services inadequate.**
6) **RPG may lead to many environmental sanitation problems.**
7) **Too many prople may lead to inadequate school rooms and facilities.**
8) **Economic problems may be an effect of RPG.**
9) **Too many people may cause pollution.**
10) **And others.**

Through guided discussion, the pupils agree to trim the list to the effects of RPG which directly affect man's health and well-being (Nos. 1, 2, 3, 5, 6 and 9). The others, like effects of RPG on transportation, economy and schools will be taken up in social studies.

In each of the tentative answers selected, the pupils shall also find out what the government is doing to solve these problems.

3. Gathering of data

You may ask the class how they plan to gather data to provide indepth discussion of the tentative answers.

The pupils may suggest the following:

a) Invite the home economics teacher to talk about effects of food shortages on man's health and well-being.

b) Interview officials at the local National Grains Authority office on the rice and corn situation of our country and provinces.

c) Draw pictures of overcrowding in a household, bus, movie-house, church, or squatter areas and tell stories, including personal experiences, related to the situation depicted in the pictures and their implications for the health of the people.

d) Conduct a field trip to a community to observe water supply; refuse disposal; sewage disposal; insects and rat control; water, soil and air pollution.

e) Interview the health officer or the sanitary inspector to find out how many new health facilities have been built in the community over a period of 10 or 20 years.

f) Study government programmes for primary health care.

g) Interview the health officer to find out if there has been any increase in local health personnel over the years, including government and private physicians, nurses, dentists, midwives, and sanitary inspectors.

It may be good to call attention again to the hypotheses which should serve as guide for gathering information:

a) **RPG may lead to food shortages and malnutrition.**

b) **Too many people living in a community may result in overcrowding.**

c) **Overcrowding may contribute to the spread of communicable diseases.**

d) **RPG may make health services inadequate.**

e) **RPG may lead to many environmental sanitation problems.**

f) **Too many people may cause pollution.**

After discussion on how to go about doing step three, the class is divided into committees or groups to gather the needed data. (Step three may take a week to finish.)

4. Reporting data/findings

At this stage, the pupils are now ready to present the data/information they have gathered. Various methods may be used to present the findings. In this lesson, the committee which worked on hypothesis No. 1 invited the home economics teacher to discuss the relationship between food, health and school performance.

The committee, likewise, presented a table showing the rice and corn production of the country and selected provinces for the period 1975-1981. Another member discussed government programmes for food production.

The committee members who gathered data on hypotheses Nos. 2 and 3 presented pictures of an overcrowded house, a moviehouse and a squatter area. Two members took turns to discuss the situations depicted in the pictures and their implications for health. Some members dramatized getting a ride in a bus during rush hour. Another member talked about government housing programmes.

One member of the committee which tackled hypothesis No. 5 presented the Primary Health Care programme and the Sarikaya project of the Ministry of Health. Another member presented data on the number of government health centres and health personnel in the area over a 20 year (1960-1980) period. The third member reported on the present number of available physicians, dentists, nurses and midwives in private and public practice in the town.

The committee in charge of gathering data for hypotheses Nos. 6 and 9 presented a two-part report: (1) current status of the water, sewage and drainage systems of the town based on their field trip; and (2) suggestions on how to improve the present environmental sanitation in the community.

5. Testing the hypotheses

Following the committees' reports, the class discusses and analyses the information presented to ascertain its utility and reliability.

Such questions as these are asked:

a) Did the committee consult several sources of information? How would you evaluate the sources of information? Are they reliable?

b) Were data/findings that support, as well as those that did not support, the hypotheses presented?

The teacher then leads the class to analyse each of the hypotheses in the light of the information presented.

Throughout the reporting, the pupils look at the hypotheses written on the board and try to compare them with the information presented, to find out to what extent the information supported/did not support the hypotheses.

6. Formulating concepts and generalizations (conclusions)

In the light of the information presented, the pupils now decide whether to accept or reject the hypotheses or gather further information on the problem(s). For those which they have sufficient information on, they proceed to accept or reject the hypotheses one by one. Then they formulate generalizations, as follows:

a) Long periods of food shortage either in quantity or variety, lead to malnutrition.

b) An increase in population requires a corresponding increase in food supplies.

c) Over-crowding is a condition favourable to the spread of communicable diseases.

d) As the population of a community increase, the environmental sanitation needs of that community, likewise, increase.

e) RPG brings about environmental sanitation problems such as inadequate water supply, insect and rat control, food sanitation and improper sewage services.

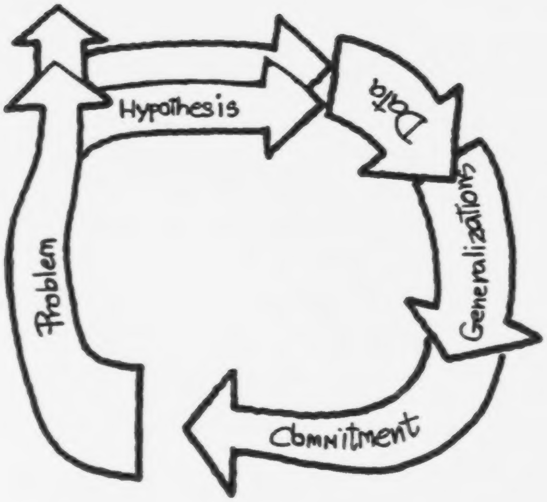
f) The government has taken steps to solve the problems brought about by RPG, through programmes such as: (list national programmes).

7. Stating one's commitment

The pupils may commit themselves to pass on the new knowledge they have just learned by explaining the harmful effects of RPG on man's health and well-being to their parents.

Excerpted from: Population Education Programme. *Module on the inquiry approach in the teaching of population education,* Manila, Ministry of Education, Culture and Sports, 1984, p. 29-34.

EFFECTS OF RAPID POPULATION GROWTH ON FOOD PRODUCTION



Objectives

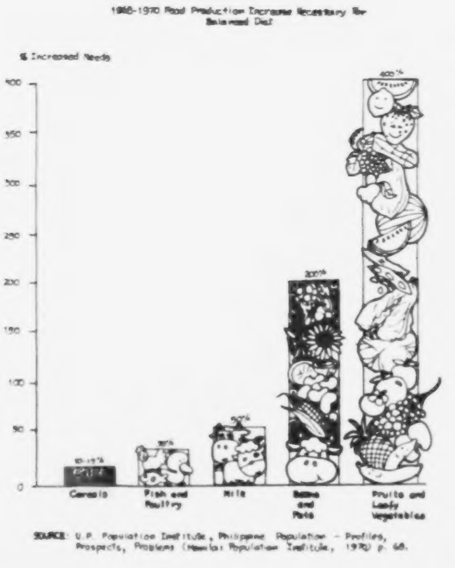
The student should be able to:

1. Realize that rapid population growth has both positive and negative effects on food production.
2. Show statistically that malnutrition and undernutrition, especially among young children, are common health problems in places with rapid population growth.
3. Draw an inference on the relationships among food production, food supply and rapid population growth.
4. Explain the effects of rapid population growth on food production.

Procedures

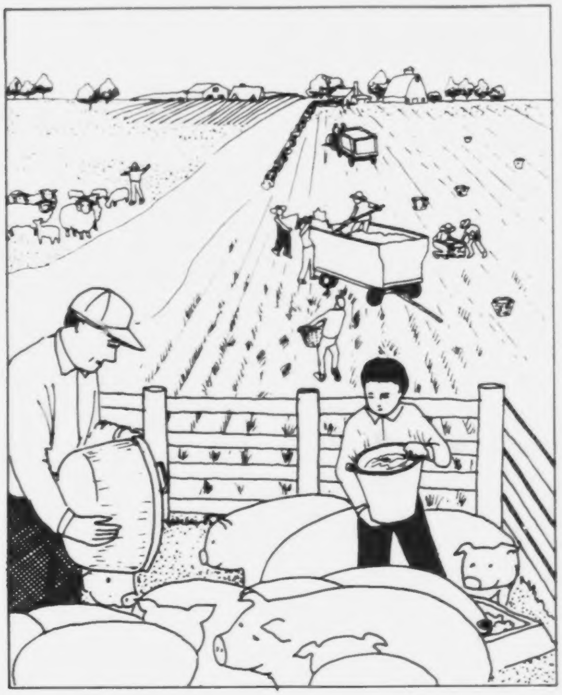
1. Recognizing and stating the problem

To serve as springboards for discussion of the problem, present the following materials:

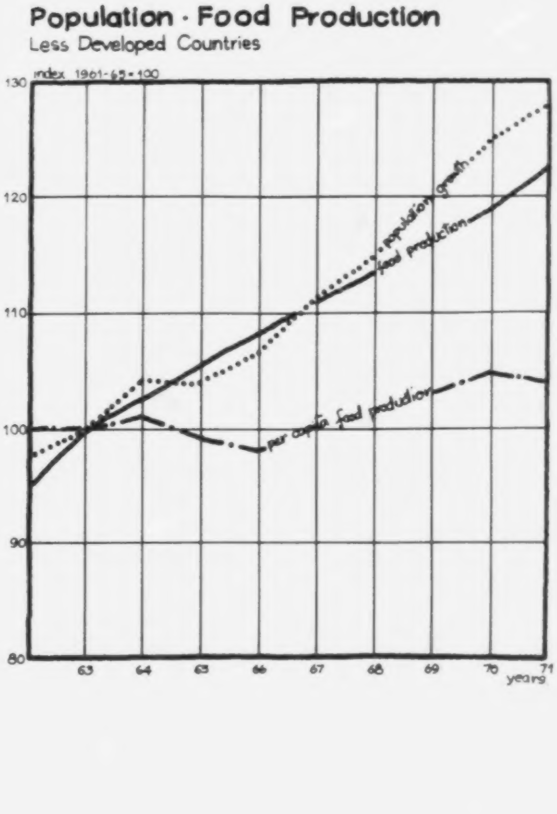


SOURCE: U.P. Population Institute, Philippine Population – Profiles, Prospects, Problems (Manila: Population Institute, 1970) p. 68.

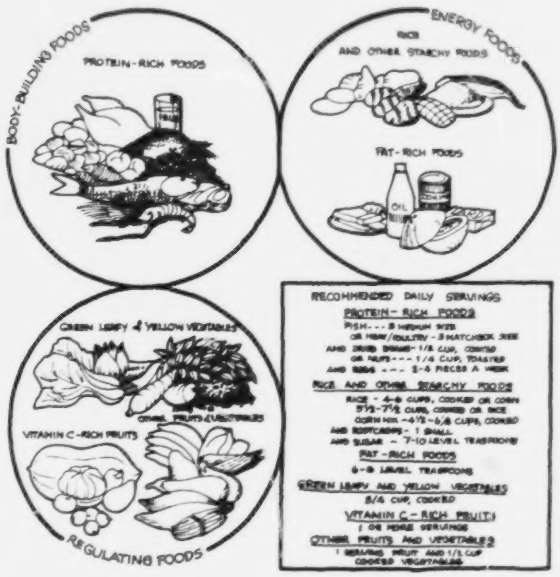
a) An enlarged graph showing the quantity and nutritive value of foods consumed per capita per day by Filipinos or other nationality, compared to recommended allowances. (This lesson assumes that consumption is less than the recommended levels.)



b) Food production campaign or green revolution posters which imply a need to increase food production.



c) Graph comparing the rate of increase in population to the rate of increase in food production.


BODY-BUILDING FOODS
PROTEIN-RICH FOODS
ENERGY FOODS
RICE AND OTHER STARCHY FOODS
FAT-RICH FOODS
OIL
GREEN LEAFY & YELLOW VEGETABLES
OTHER FRUITS & VEGETABLES
VITAMIN C-RICH FRUITS
REGULATING FOODS
RECOMMENDED DAILY SERVINGS
PROTEIN-RICH FOODS
RICE AND OTHER STARCHY FOODS
FAT-RICH FOODS
6-8 LEVEL TEASPOONS
GREEN LEAFY AND YELLOW VEGETABLES
3/4 CUP, COOKED
VITAMIN C-RICH FRUITS
1 OR MORE SERVINGS
OTHER FRUITS AND VEGETABLES

EAT A VARIETY OF FOODS EVERY DAY
TO GET ALL THE NUTRIENTS YOUR BODY NEEDS

d) A poster showing different foods.

Begin by discussing the nutritional status of Filipinos (or other nationality) shown in the graph. This should point to the fact that they are undernourished.

What could be the reason for such a condition? (A number of reasons may be given, but guide the students to arrive at a possibility of inadequate food supply as one of these reasons.)

Show the class a poster of the different foods. Tell the students to analyse the listed foods carefully and then ask:

a) Which of these common foods do you eat? Do not eat?

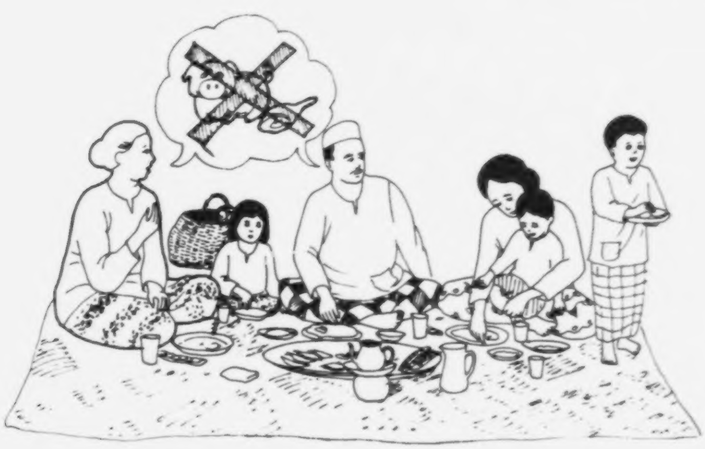
b) What other reasons can you give that would explain the nutritional status of our country? (With the help of the poster, have the other foods analysed.) What else do you not eat? (The students will identify foods they do not know, and some foods they do not eat because of beliefs related to illness.)

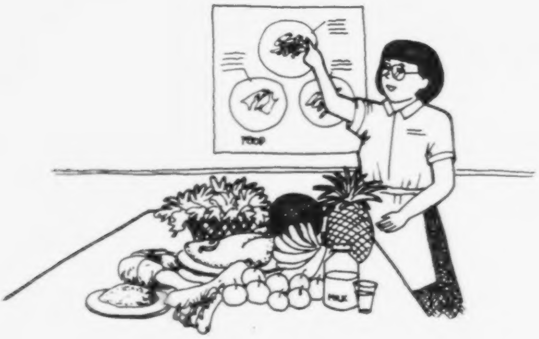
c) If these beliefs regarding foods are not true, what do we call them? (They are called food fallacies.)

d) Do we have sufficient quantities of the different foods in the poster to supply our needs? (Food supply is not' sufficient. The graph will prove this insufficiency.)

e) There are reasons for the nutritional status of the Filipinos/other nationality. What are they? 1. wrong beliefs, 2. lack of information on some foodstuffs, 3. lack of food supply.)

These may be some of the reasons for the nutritional status of the Filipinos. However, there are possible solutions to these problems which can help to improve the nutritional status of the Filipinos.

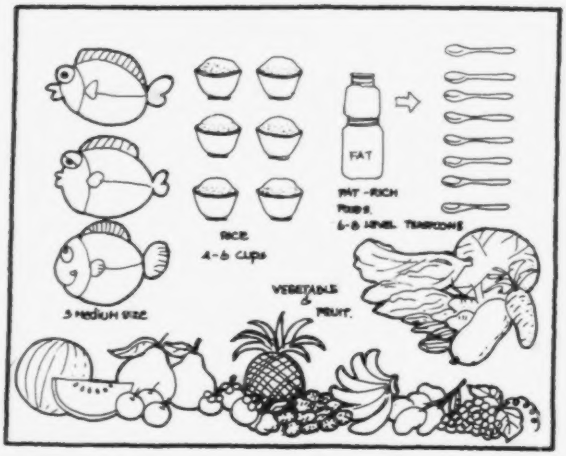


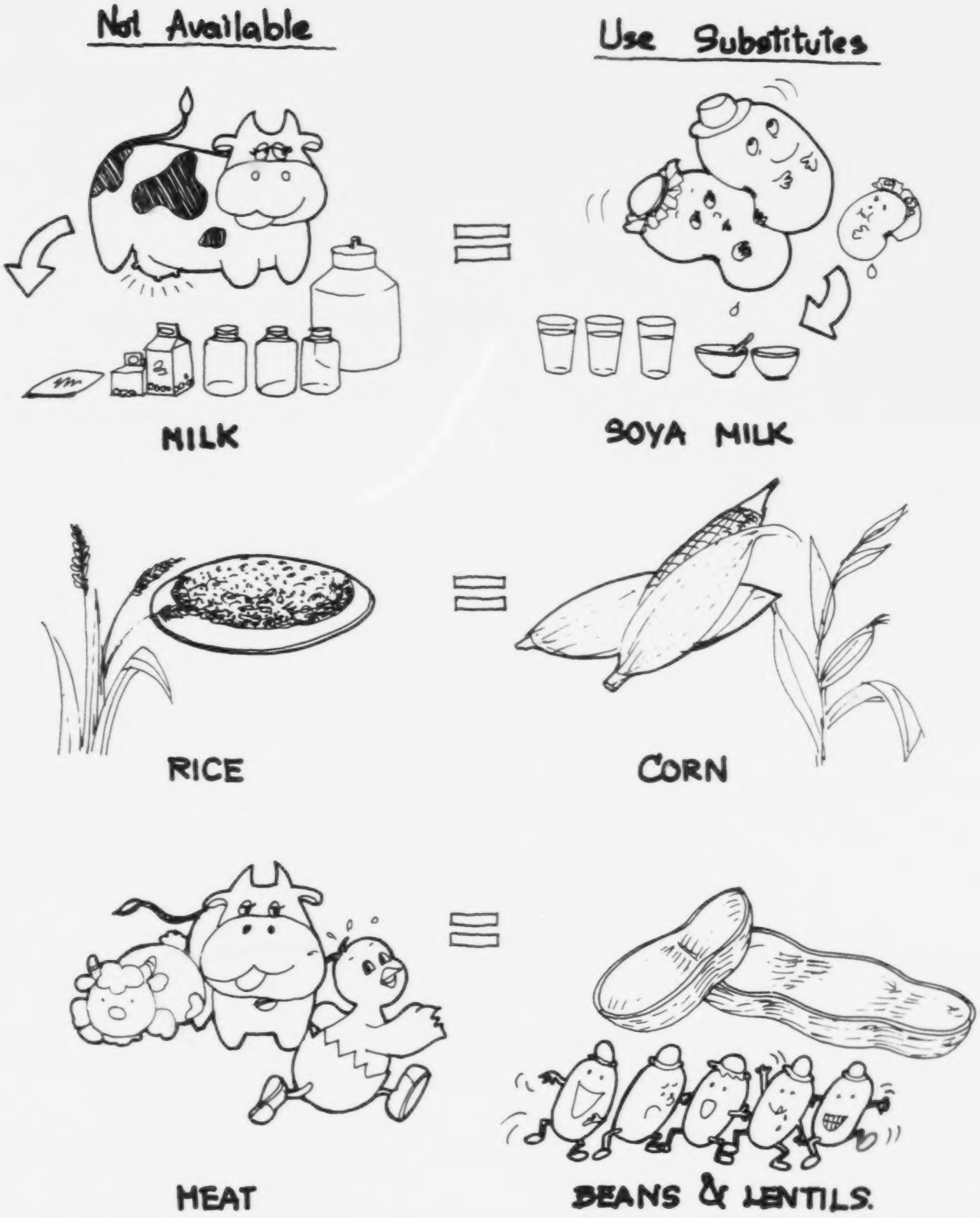


1. **Food fallacies** – Erase from our minds any wrong beliefs, because they have no truth or basis. (The teacher points out the importance of food.)

2. **Inadequate information on the value of foods** – Emphasize to the children and parents the food requirements and quantity needed by every individual.

3. **Lack of home management skills by the parents** – Make the students, boys and girls, know the importance of preparing the right kind and quantity of food for family health.


3 medium size
RICE
4-6 cups
FAT
FAT-RICH FOODS
6-8 LEVEL TEASPOONS
VEGETABLE & FRUIT


Not Available
Use Substitutes
MILK
SOYA MILK
RICE
CORN
MEAT
BEANS & LENTILS.

4. **Lack of supply at certain times** – Teach the students to substitute foodstuffs not available at certain times. Foodstuffs with the same nutrients may be used to substitute for seasonal foods not available at certain times.

Let us look at the graph and find out what is happening to our community. How can we gather this kind of information?

Allow the students to suggest ways of gathering data. Students at this year level should have had experience in this. The following survey may be suggested.

2. Formulating the hypotheses

After discussing the problems, the following hypotheses are presented:

a) Food production may affect the quality of the diet.

b) Inadequate foods supply may result in malnutrition and undernutrition.

c) Rapid population growth may affect the adequacy of food supply.

d) Rapid population growth may be a strong motivating factor for more food production.

3. Gathering data

To gather the data, a survey and research in secondary data should be undertaken. The survey should include the following data:

a) Foods available in the community;

b) Quantity available; and

c) Original sources of different foodstuffs.

The survey should be conducted in a market.

To execute the survey, the following should be done:

1. Request permission from the school head to make the survey;
2. Divide the class into small groups to survey the different sections of the market;
3. Discuss the questions of safety and proper conduct during the trip and while making the survey;
4. Discuss pointers on how to record the survey; and
5. Conduct the survey.

The second method of gathering data is to search for information that will show the relationship between the rate of population increase and food supply; reports of studies on the problems of malnutrition and undernutrition as a result of limited food supply; quantity and nutritive value of foods consumed per capita per day, compared to the recommended daily allowance.

If there are records of agricultural products raised in the locality or if there is an office of the Bureau of Agricultural Extension located in the locality, a resource person in that office may be invited to talk on local food production and supply. This activity is an alternative to the survey; whichever is feasible will depend on conditions prevailing in the community.

4. Reporting data

Have the class report their survey by tabulating the results in the following way:

Food	*Quantity*	*Source*	*Remarks*
Cereals Rice Corn	(abundant)	(locally produced)	(Some are brought in)
Root crops **(list local varieties)** Camote Gabi Tugi Cassava			
Meat **(list local meats)** beef tortoise pork bird chicken venison			
Fish and other sea products fish shells shrimps, etc.			
Fruits, Vegetables, Etc.			

Quantity may be recorded as *abundant, adequate, inadequate,* or *negligible. Abundant* means an excess of the food; *adequate* means sufficient supply to meet the demands; *inadequate* means not enough to meet the demands; and *negligible* means very limited.

Source should indicate whether the food is locally produced or brought in from elsewhere or both.

Other related information may come up during the discussion, for example; foods locally produced are not sufficient, so that they have to be brought in from outside; foods may be produced locally if assistance is received; no facilities for large scale production; and the like.

Questions:

a) What can you say about the food supply in our community as a result of your survey or after the talk of a resource person? Is it adequate or not?

b) Compare the agricultural area of five years ago with that of our community at present. What happened to the agricultural area of five years ago? (Students may cite evidence of agricultural lands converted into recreational areas, residential lots, commercial centres, school grounds,

and the like.) How did the reduction of the cultivated or agricultural lands affect the food supply of the community?

c) What inference can you make as to the limited food supply in our community? (One probable answer may be the reduction of the areas planted to food crops.)

d) Do you think the problem of food supply also exists in other parts of the country? Is food supply a problem in other parts of the world?

e) The class may be assigned some readings before this lesson is taken up. They should be asked to look up current news items that deal with problems of food supply both at home and in other countries.

5. Testing the hypotheses

After presenting the findings, the class discusses and analyses the information presented to ascertain its utility and reliability. To do this, the following questions are asked:

a) Did you consult several other sources of information in addition to the survey? How would you evaluate the sources of information?

b) Was the survey done scientifically and systematically?

c) Was the method used for gathering data reliable?

d) Was the method used for analysing data valid, scientific and accurate?

Throughout the presentation of the findings, the students compare the information retrieved against the hypotheses written on the board and identify which hypotheses have been validated or confirmed by the data gathered.

6. Formulating generalizations

In the light of the findings gathered, the following generalizations may be formulated:

a) Food production affects the quality of the diet.

b) Inadequate food supply results in malnutrition and undernutrition.

c) Rapid population growth affects the adequacy of food supply.

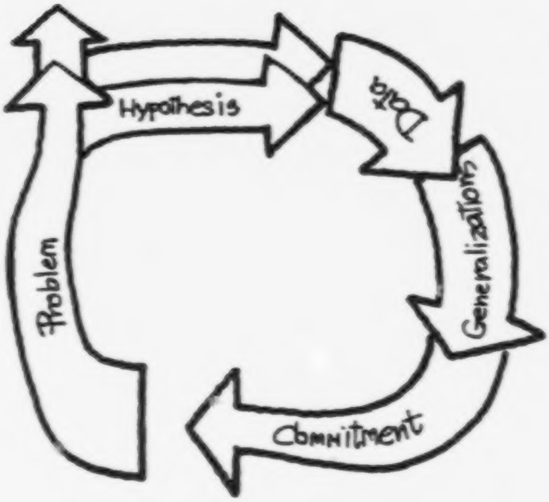
d) Rapid population growth is a strong motivating factor for more food production.

7. Stating one's commitment

The students may do this by passing on the new knowledge they have learned, by explaining to others that rapid population growth may affect the adequacy of food supply and that inadequate food supply results in malnutrition and undernutrition.

Adapted from: **Population Education Programme. *Teacher's guide in population education for home making arts (first year-second year).* Manila, Ministry of Education, Sports and Culture, 1981, p. 24-32.**

AN INQUIRY-ORIENTED TEACHING UNIT ON POPULATION GROWTH AND ECONOMIC PROGRESS



Objectives:

The student should be able to:

1. Realize that economic progress is affected by population growth;
2. Acquire facts, concepts, and generalizations related to population growth and economic growth and development;
3. Recognize the relationship between population growth and economic development;
4. Apply concepts and principles about population growth and economic development to new situations;
5. Analyse data about population growth and economic development by recognizing unstated assumptions, distinguishing facts from opinions, and evaluating relevancy of data;
6. Synthesize population data into population concepts, and concepts into generalizations about population growth and economic development;
7. Manifest desirable social attitudes relevant to the population problem;
8. Show concern about family size and the problems brought about by population growth by:
    (a) Advocating population control; and
    (b) Resolving to involve the family in the population programme of the community.

Procedures

1. Present the conceptual framework

Generalization: "The economic progress of a community is affected by population growth"

Sub-concept	Sub-generalization
1. Population Growth **a) Birth rate/death rate** **b) Age structure**	**1. a) Birth rate and death rate affect the population growth of the community.** **b) Population growth affects age structure.** **c) Age structure affects burden of dependency in a population.**

Sub-concept	Sub-generalization
2. Economic Progress **a) Factors for economic progress (land + capital + manpower)** **b) Per capita income** **c) Standard of living and economic growth**	**2. a) Dependency burden affects factors which bring about economic progress to the family and the community.** **b) Rapid population growth affects per capita income of a community.** **c) The per capita income affects the standard of living in a community and hence, affects its economic growth.**

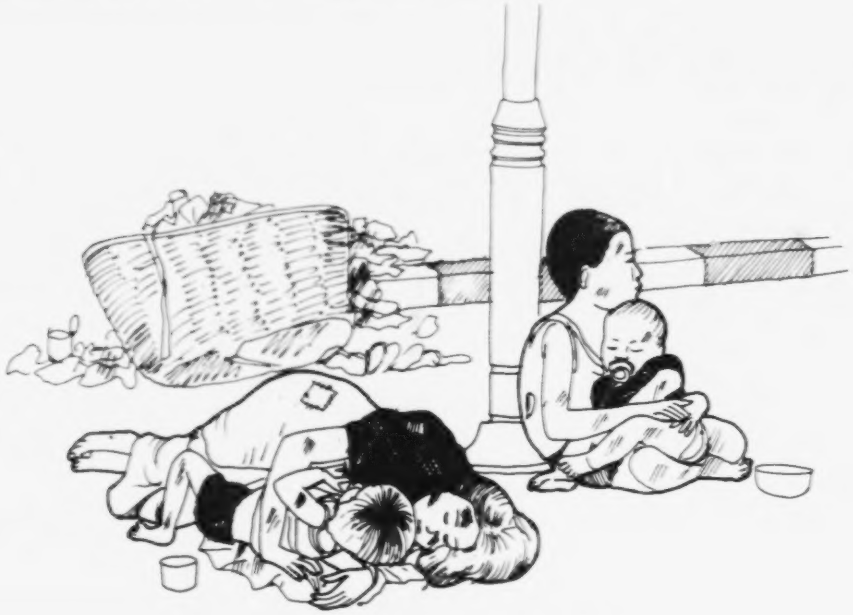
2. Defining the problem

The students are made aware of the problem about increasing population growth and its effects on economic progress with the help of some statistical data, charts, and pictures. Not only are they made aware of the problem, but that the problem concerns them. Many questions/problems may be raised but the teacher is expected to guide the students to raise questions that are manageable in terms of student ability, materials and time available.

A student can introduce the problem by reading the following:

PEOPLE, PEOPLE — WHO NEEDS PEOPLE?

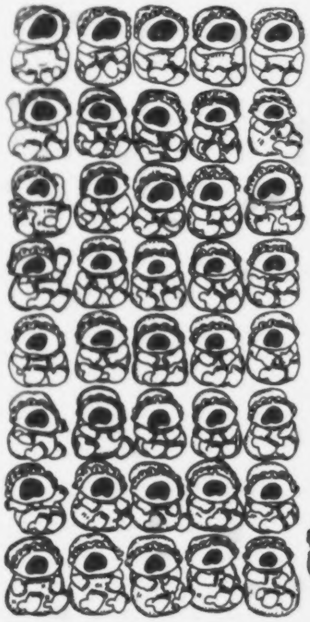
One hundred, seventy-eight years ago, Thomas Malthus, an English thinker, predicted a catastrophe on earth. In his "Essay on the Principle of Population (1798)", Malthus wrote that population always increases faster than food supply. As a result, mankind is always threatened with starvation. He warned that unless people learn to keep down the size of their families, poverty will remain and starvation will increase. Rapid population growth is the real cause of poverty among nations, he declared.



At first, other thinkers and leaders just laughed at him. They dismissed his theory, saying that poor Malthus forgot that man could conquer poverty and could prevent starvation through the use of technology and improved production. But quite recently, scholars have begun to rethink what Malthus declared. Many governments have begun to devise ways of preventing people from increasing their family size, to slow rapid population growth.

However, there are people who still do not agree with him. They argue that rapid population growth is not the cause of poverty, nor an obstacle to progress. They blame other factors.

The debate still goes on. In our community people differ in their views about the relationship between population growth and progress. As the poem below says:



People today talk about people.

Some people say we need more people.

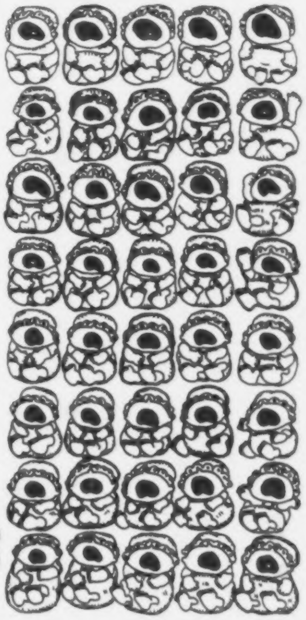
Others say we need less people.

"Power and Progress" are what some people expect with less and less people.

"Power and Progress" are what the other people expect with less and less people.

If you ask me which view is correct about people.

I think I'll ask first from more and more people.



Among the questions that the student might be anticipated to raise are:

1. ***How do birth rate and death rate affect the population growth of a community?***
2. ***How does population growth affect age structure?***
3. ***How does age structure affect economic progress?***
4. ***How is the dependency burden affected by population growth?***
5. ***How does the dependency burden affect economic progress?***
6. ***How does population growth affect per capita income?***
7. ***How does per capita income affect standard of living and economic progress?***

3. Hypothesizing

The students are made to examine and classify available data. They are motivated to find out which data may serve as leads to the solutions of each problem. This will involve some seeking of relationships and drawing logical inferences. But more important, the students must be able to state a hypothesis for each of the problems, such as:

1. **If birth in the Philippines exceeds death, then population growth occurs.**
2. **If population grows faster, then a community tends to have a young population.**
3. **If a community has a young population, then it tends not to progress faster.**
4. **If population grows faster, then the burden of dependency ratio tends to be higher.**
5. **A community with a high dependency ratio tends to be a hindrance to economic progress.**
6. **If the population of a community increases rapidly, then per capita income tends to be low.**
7. **If per capita income is low, then standard of living tends to be low and economic progress slower.**

4. Data gathering

Three important tasks are involved in data gathering: (1) translating evidence to a language or forms (graphs or charts) that the class will easily understand; (2) interpreting the data gathered; (3) then, classifying the data, as to whether they confirm or contradict the hypotheses.

1. **Material resources to be supplied to students:**

   a) Statistical data about two communities

   Data A – Showing rapid population growth including age-sex distribution or dominant age group.

   Data B – Showing slow population growth including age-sex distribution or dominant age group.

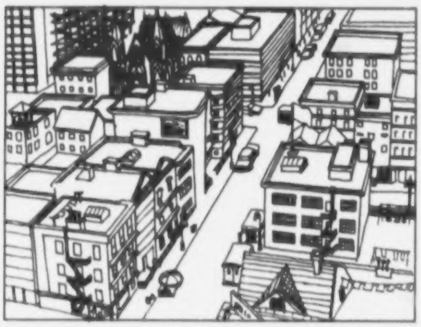
   b) Conflicting views on population control

   View A – The need to control population growth. When a baby is born, the mouth is seen as an additional consumer.

   View B – There is no need to control population growth. When a baby is born, one sees the hands as those of a potential producer.

2. **Some suggested teaching techniques:**

   a) Review concept of progress and resources through pictures.



i) What manifestations of community progress are illustrated in the picture?

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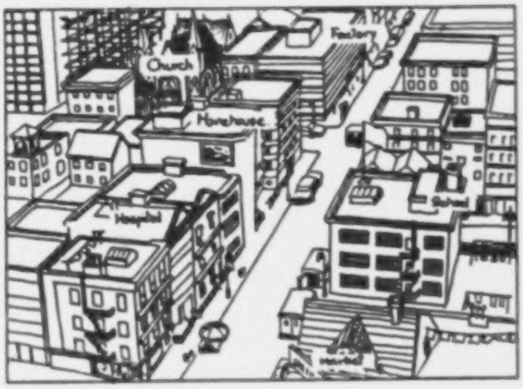
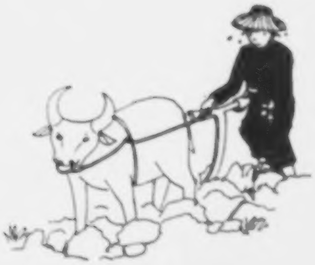
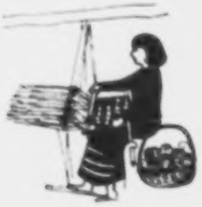
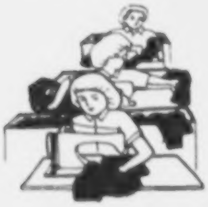
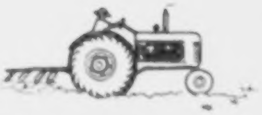

Church
Factory
Warehouse
Hospital
School

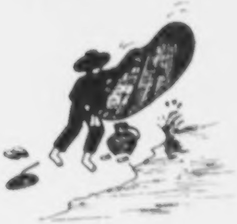
ii) A progressive community must have the things shown in the picture. Explain why.

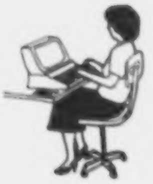












iii) Which of these workers do you think are found in a progressive community? Why? In a backward community? Why?

b) Present statistical tables comparing the GNP per capita and population growth of developed and developing countries.

Table 1. GNP Per Capita and Population Growth of Developed and Developing Countries

	1979	1970-1978 Growth Rate	
Country	GNP Per Capita (US $)	Population	GNP Per Capita
A. Developed Countries			
1. Australia	9,100	1.6	1.5
2. Japan	8,000	1.2	7.8
3. New Zealand	5,940	1.7	0.9
4. Singapore	3,820	1.5	6.6
B. Developing Countries			
1. Bangladesh	100	2.2	0.2
2. Bhutan	80	2.2	0.2
3. India	190	2.0	1.6
4. Nepal	130	2.3	0.3
5. Pakistan	270	2.9	1.5

Table 2. Per Capita Income, Rate of Growth of Population and Capita GNP for Country Groups, Asia and the Pacific

Countries in the Region	No. of Countries	Average GNP Per Capita US$	Average Annual Rate of Population Growth (1970-78)	Average Rate of Growth GNP Per Capita (1970-78)
Less than				
$175-349	10	171.76	2.475	0.912
$350-749	7	562.85	2.17	3.02
$750-1,999	3*	1,263.33	2.56	3.125
$2,000- and above	6**	6,615.00	1.68	5.11

Note: * Except TTPI
** Except Brunei

Tables and numbers also tell about the progress of a community/country. Can you explain what the data in the table mean? Which of the nine countries do you think is more progressive? Why?

The teacher may ask questions to elicit responses about the implications of a young population on the economic development of a community, if students failed to raise such questions.

c) Compare what other people say about progress and the size of the population. Present the two conflicting views (A and B) presented here. Ask the students which of these views they think is correct and to explain their answer.

A. Negative view of population growth

Population and Production: Twin Problems*

The problem of the population explosion in the Philippines has become real because gradually, for the past 10 to 15 years, we have allowed consumption to outdistance production.

The Philippines has in fact one of the highest rates (3.1 per cent) of population increase in the world. Babies are mass produced in the Philippines: 3 Filipino babies are born every minute, 191 every hour, 4,503 a day, 32,240 every week, 139,707 every month and in one year (1970), 1,676,481.

Mercedes Concepcion of the Population Institute, University of the Philippines, pointed out:

> . . . the rate of natural increase (births minus deaths) expressed in percentage terms (3.4 per cent) is impressive. A rate of increase of 3.4 per cent represents an increase of 1.2 million Filipinos each year. This annual addition has a very important implication, as population size increases, if the rate remains the same, the amount of annual increments to the population will become larger and larger. The yearly increases ultimately become so large that numbers which look impossibly high are obtained. For example if the present Philippine population of more than 39 million continues to grow at its current rate for only one hundred years, the total population would exceed one billion persons in 2072. This is equivalent to about three tenths of the world's present inhabitants, and would be roughly equal to moving all of the population of Africa, North America, Latin America and the U.S.S.R. into the 7,000 islands composing the Republic of the Philippines.

What does this mean for the Philippines? It means that the country has all the ingredients of a very serious problems, one which could reach very critical proportions in the decade of the seventies. Should present rates continue, the children born immediately after World War II who live to retire at 65, will be residing in a nation three and a half times as populous as at present. Thus, the impact of runaway population growth could blight the lives of the children and grandchildren already born or to be born from now on."

Labour Force and Production

With our present birth rate, our labour force is absorbing an average of nearly 1,300 new workers each day. In the next five years, this daily number might be increased to 1,500.

Our figures on unemployment and underemployment are not easily discernible but it is easy to imagine how the ranks of the unemployed and underemployed will increase significantly if not enough job opportunities are created to accommodate the increase.

There is a shortage of skilled and semi-skilled workers in some areas of the economy but there is certainly an oversupply of unskilled workers.

Our rate of growth of production for the past four to five years has averaged at 6 per cent. The imposition of the floating rate (for the peso) threw the economy out of kilter' and consequently brought our rate of growth down.

While it is true that we now are faced with the tricky problem of creeping inflation, still, the basic reason why prices continue to soar is that we are still suffering from underproduction.

The country today is urgently in need of more food, more clothing, more and cheaper medicine, and more housing.

Our present population of over 39 million, it has been pointed out, requires some 6.6 million dwelling units. The Presidential Assistant for Housing has estimated that for 1960-1980, housing requirements would be about 12 new dwellings per thousand population. The reported present rate of construction of only two to three per thousand population still underlines the need for a more substantial and accelerated housing programme.

The increasing need for housing reflects our burgeoning population growth in the past ten to fifteen years. Now, too, we are talking about elevated highways or skyways in the urban areas because of the rapid increase in vehicular traffic. Congestion in cities has also brought about problems of health and sanitation, peace and order, drainage and sewerage, and a continued supply of water. The need for more infrastructure, more roads, harbors, airports, bridges, irrigation systems continues because of our unchecked population increase. It has become apparent that our rate of production has to catch up with our rate of population increase.

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* An excerpt from an article by Rodolfo G. Tupas, published in the *Sunday Times Magazine*, May 28, 1972.

A Stumbling Block

It is obvious that one stumbling block to a quickened pace of development is the problem of an unlimited population. It is for this reason that many economists argue for family planning. There seems little doubt that if a country practices family planning, or the limiting of children to the number a couple can afford, the pace of development will quicken.

When people have more children than they can afford, they become impoverished. And the more children they add, the more abject their poverty. Abject poverty is dehumanising.

Family planning is worthy of exhortation but unfortunately it is far easier to recommend than to implement. Sometimes, especially among the poor, there are cultural difficulties. To some men, children are a symbol of manliness. If a man is poor and lacking in status symbols, what greater symbol is there than one dozen children?

It should be remembered that in impoverished rural areas, children help in farm chores. This is especially true in the case of farmers who have to rely on the carabao rather than the tractor.

There is a special added difficulty in the Philippines which is predominantly Catholic. The incumbent Pope has failed to openly approve of the use of the birth control pill.

Limiting a country's population cannot be done over-night. In fact, this task is one of the most difficult social changes to institute. It is not, on the other hand, impossible to implement.

In the final analysis, the hope for a cure of over-population lies in this country's process of industrialization. This includes the proper development of agriculture or the industrialization of agriculture.

Robert Heilbroner in his book "The Great Ascent" pointed out that "if we are to judge by the experience of the past, industrialization brings its own subtle forces to bear on the birth rate. The altered status of women, the economic disadvantages of children in an industrialized environment, the delayed age of marriage, and, not least, the expanded horizon of expectations, all exert pressure which seems to depress the natural birth rate."

Scientific and technological innovations in the industrial process do provide the hope for densely populated countries which seek escape from the Malthusian trap. Along with this, an all-out campaign for family planning would help in stemming the tide of an overwhelming population. It is not quantity but quality that is the underlying principle in the twin problems of population and production.

B. Positive view of population growth

Contrary Views on People[*]

Proponents of the family planning movement point an accusing finger at their poverty as proof that they have been having too many babies. Whatever progress they make, the argument continues, is negated by a high growth rate of the population that eats away any and all the country's surplus of production and worse, competing with the resources that, as it is, are already in short supply.

"This is a favourite line of the World Bank," says Emmanuel Q. Yap, secretary-general of the Asian Development Centre and formerly head senior member of the Congressional Economic Planning Office. "Its president, Rober MacNamara, has been telling us Asian nations that we are poor and will always be poor and will become even poorer because our population continues to grow at too fast a rate."

In other words, Yap is against family planning as a state policy.

"I find it obnoxious, this interference of the state on the individual's sacred right," Yap says.

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[*] Excerpted from an article by Ernesto M. Macatuno, published in the *Sunday Times Magazine*, May 28, 1972.

"While those who advocate family planning say that they work on persuasion, and that nobody is forced to submit to the methods of birth control they teach, I say that there is a very thin line dividing persuasion and compulsion."

Indeed, if family planning succeeds in becoming generally accepted in the Philippines, "large families" surely will become a dirty phrase. Large families – or large, poor families, it must be qualified – will suffer from some kind of a stigma if frowned upon by society. And this is an aim of the family planning movement.

"The argument used by people like MacNamara that Asia is poor because it has too many people is not true, except for some historical situations like that found in China," says Yap. "If a country, without foreign exploitation, with its people working together relentlessly, using to the fullest its resources, remains poor and is getting even poorer, then perhaps, it must practice some form of birth control. This situation may also exist in India. But does it apply to other countries in Asia, to the Philippines in particular?

"The Philippines has enough natural resources and the technological know-how and the intelligent people to support a population twice and even thrice the present one. At 37 million I consider the Philippines still underpopulated."

National Economy

"It is true that the great masses of the Filipino people are poor, very poor. But this is not because there are too many of them and that there are too few resources, but that the resources and the technological know-how are used for and are controlled by only a few Filipinos and foreigners."

"In other words, the majority of Filipinos are being robbed of their right to use and enjoy and live by the country's resources and technological know-how. And here come these proponents of family planning now telling them that it is because they produce too many babies! These poor families can support more children if only they are not deprived of the use and enjoyment of the country's resources."

"We are told that the country's economy cannot support more people and that therefore, as a solution, we must curb the growth rate of our population."

"I say that the economy must be adjusted to the people, not the people to the economy. What we need to do is not curb our population growth, but rationalize our economy, meaning that we must develop an economy that is for, of and by the people. What do we have at present? A maldistribution of wealth and an irrational use of our resources and industries. What we have is an economy controlled and owned by only a few Filipinos and vested foreign interests."

Enrichment, Not Restriction, of Life

Holding a different view is Senate President Gil Puyat. He says that, on the contrary, "the objective of family planning is the enrichment and not restriction, of life. With less children, poor families have a better chance of staking a bright future.

"With 37 million people the Philippines is already overpopulated. By 1980 we will have, if the present growth rates continue, about 54 million, that would make us the fifth largest nation in the world."

"By then what shall we do with the additional 17 million people? That would be a tremendous burden to the country. By 1980 with a population of 54 million, we must generate something like 16,800,000 new jobs. How can we provide these? I fear that the economy cannot absorb these additions to our population."

An answer to this, in Senator Puyat's mind is: Control population growth, practice family planning.

This, however, works on the assumption that the 17 million added to the population will be purely and simply an "economic burden." Can they not also be productive units?

As Yap says, by rationalizing our economy we can support a population twice or thrice our present one. Japan, a much poorer country in point of natural resources and size of arable lands, right now, with over 100 million people, is facing a labour shortage! Japanese industry is frantically searching for more hands to work in its factories. How did this happen in Japan? A decade ago they instituted family planning because they too, at this time, were afraid of a population explosion. The answer they found out is science and technology and a rational use of their economy and resources.

Motives

The motives of this family planning movement or planned parenthood also are open to question. The target here is the poor Filipino family. The size of the poor Filipino family is being limited principally because it is poor. In other words, the family planning movement is discriminatory. It treats the poor Filipino families as inferior and undeserving to have many children.

Anyway, efforts of the proponents of family planning are thwarted by these poor Filipino families because they reason out that "their only wealth is their children." On this optimistic note, they foresee a future bright for them. Indeed every individual, save for the idiot and the lazy, has a tremendous potential for personal advancement. Every individual, born poor or rich, can contribute to the nation's growth. It is only a question of providing the opportunities and this can be done by having an economy that is, as pointed out by Yap, for, of and by the Filipino people.

The family planning movement in the Philippines is only a part of the world-wide movement of white, Western nations led by the United States. Observers point out that the U.S. has initiated this move not out of fear of a world that in the future will choke itself to death because of overpopulation, but because of the grim view of the peoples of the Asian continent spilling over to their countries. It is the same old bogey of the Yellow Peril. Only this time, the brown and the black people have been added to their problem.

5. Developing a conclusion

Each of the hypotheses are tested by the factual information from the readings, materials, charts, tables, pictures, and graphs.

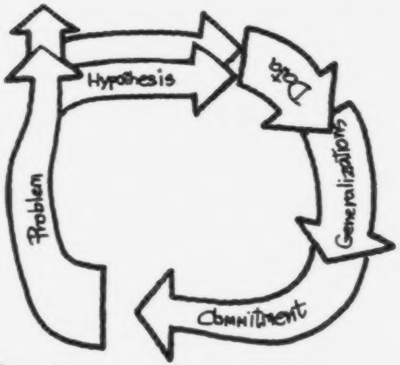
Meaningful relationships between the data and the hypotheses, which served guides for the search for data, are sought. The anticipated conclusions or sub-generalizations are as follows:

1. **Birth and death rate affect the population growth of the community.**
2. **Population growth affects age structure.**
3. **Age structure affects the burden of dependency in a population.**
4. **Dependency burden affects factors which bring about economic progress to family and the community.**
5. **Rapid population growth affects per capita income of a community.**
6. **The per capita income affects the standards of living in a community and hence affects its economic growth.**

All these can be synthesized in one generalization: "The economic progress of a community is affected by population growth".

Excerpted from: Unesco: Population education: a source book on content and methodology. Bangkok: Unesco Regional Office for Education in Asia & the Pacific, 1980, p. 71-77.

INQUIRY APPROACH TO THE EFFECTS OF POPULATION GROWTH TO SOCIO-ECONOMIC DEVELOPMENT



Objectives:

The student should be able to:

1. Understand the relationship between population growth and socio-economic development
2. Understand the impact of socio-economic development to population growth and vice-versa

Procedures

1. Recognizing and stating the problem

The inquiry approach assumes that real learning starts with a confusion, puzzle, dilemma or problem bothering the learners, if not blocking their goals in life. Oftentimes, it is necessary to make students aware of the problem. For instance, learners might be presented the following conflicting views:

Population growth could stimulate economic progress, because such growth increases the demand for goods and services; and increased demand may lead to increased investments and further economic growth. On the other hand, population growth may have a negative impact on economic development in that it limits further the resources available to people. Hence, the confusion.

Inquiry replicates to some extent the procedures of scientific method. The statement of the problem need not only be explicit and precise, but more important *researchable*. Which of the questions below meet these requirements?

a) What are population growth and socio-economic development?

b) Is socio-economic development affected by population growth?

c) How does population growth affect socio-economic development?

Question (a) is precise but is not researchable, while question (b) is answerable by *yes* or *no;* but does not provide guidance for in-depth research. On the other hand, question (c) is explicit, precise and researchable. The statement of the question/problem implies relationship between variables, namely an independent variable – in this case population growth, which causes change in another variable – the dependent variable, in this case socio-economic development.

2. Formulating the hypotheses

The process of hypothesizing involves making educated guesses or proposing solutions to the problem in the light of the learners' experiences or data already available to them. A well-stated hypothesis can serve as a useful guide in the search for relevant data. A hypothesis is a further delimitation of the research problem – a refinement of the statement of the problem. Two examples are the following:

a) Planned population growth tends to enhance socio-economic development.

b) Rapid population growth tends to retard socio-economic development.

An "*if . . . then*" proposition is therefore formulated indicating that if certain *conditions,* i.e. planned/rapid population growth occur then enhancement/retardation of socio-economic development is to be expected. Note the use of the words "tends to" rather than merely the action word "enhances", for in social science inquiry – to which population education belongs – no absolute and conclusive outcomes are expected.

3. Data gathering

Two decisions need to be reached prior to data gathering, namely (i) what data are needed; and (ii) how do we go about getting them. From the statement of hypothesis two *sets* of data are needed: (i) evidence that when population growth is planned in a given country, socio-economic development occurs; and (ii) evidence that in countries with rapid population growth (i.e. 2 per cent and above), socio-economic development has been relatively slow.

There are a number of ways to gather data such as observation, interview, questionnaire, case studies, and documentary analysis. For the above-mentioned hypothesis, documentary analysis is probably most relevant. For instance, the following World Bank Table might be one of the sources of useful data. (see page 60)

Assuming that Gross National Product is an indicator of socio-economic development, then the two following Tables below might be used to test the hypothesis.

Table 2 extracted from Table 1 supports hypothesis 1, while Table 3 supports hypothesis 2.

4. Formulating the concepts/generalizations

Developing a conclusion involves discovering meaningful patterns of relationships among informational data derived from observations, interviews, case studies, or documentary analysis. The expected relationships are, in fact, explicit in the hypotheses. If the hypotheses are confirmed, then the conclusion is a mere re-statement of the hypothesis, which is then as follows:

a) Planned population growth tends to enhance socio-economic development.

b) Rapid population growth tends to retard socio-economic development.

5. Applying the conclusions/generalizations

There are two basic components in this final step of the inquiry process, namely (i) testing the conclusion against new evidence; and (ii) generalizing about the results.

If the learners are perceptive enough, or through the prodding of the teacher, they may wonder if, in fact, socio-economic development could be the independent variable instead of the dependent variable – which brings about a decline in population growth. Hence, a new hypothesis

Table 1. Population (mid-1978 and mid-1979) GNP at market prices (1978 and 1979) GNP per capita (1978 and 1979), and average annual growth rate (1970-78) GNP at market prices rounded to US$ tens of million. GNP per capita rounded to nearest US$10.

Country	*Population (000)*		*GNP at market prices (US$ millions)*		*GNP per capita (US$)*		*Growth rate (%)*	
	mid-1978	*mid 1979(P)*	*1978*	*1979(P)*	*1978*	*1979(P)*	*Population 1970-78*	*GNP per capita (real) 1970-78*
EAST ASIA								
China	952,223	965,279	219,000	n.a.	230	n.a.	1.6	n.a.
Hongkong	4,606	4,671	15,400	18,690	3,340	4,000	2.0	6.9
Japan	114,898	115,835	884,500	1,019,480	7,700	8,800	1.2	7.8
Mongolia	1,576	1,622	1,100	1,270	700	780	3.0	3.1
Republic of Korea	36,648	37,265	48,000	55,930	1,310	1,500	2.0	8.1
EASTERN SOUTH ASIA								
Brunel	200	210	1,840	2,240	9,220	10,680	5.7	4.9
Burma	32,205	32,986	4,480	5,140	140	160	2.2	1.7
Democratic Kampuchea	8,559	n.a.	n.a.	n.a.	n.a.	n.a.	2.5	n.a.
Indonesia	135,993	138,891	5,780	52,200	340	380	1.8	5.3
Lao People's Democratic Republic	3,280	3,353	n.a.	n.a.	n.a.	n.a.	2.5	n.a.
Malaysia	13,300	13,642	15,270	17,960	1,150	1,320	2.7	4.8
Philippines	45,639	46,803	24,410	28,110	530	600	2.7	3.7
Singapore	2,334	2,368	7,600	9,050	3,260	3,820	1.5	6.6
Thailand	44,517	45,486	23,390	26,920	530	590	2.8	4.5
Socialist Republic of Viet Nam	51,742	n.a.	n.a.	n.a.	n.a.	n.a.	3.1	n.a.
MIDDLE SOUTH ASIA								
Afghanistan	14,616	15,011	2,290	2,590	160	170	2.2	2.7
Bangladesh	84,655	86,961	7,280	8,320	90	100	2.8	0.2
Bhutan	1,240	1,267	90	110	80	80	2.2	0.2
India	643,896	658,337	117,520	125,990	180	190	2.0	1.6
Iran	35,831	n.a.	n.a.	n.a.	n.a.	n.a.	3.0	n.a.
Maldives	145	149	30	30	170	200	4.0	2.1
Nepal	13,625	13,947	1,580	1,790	120	130	2.3	0.3
Pakistan	76,078	78,527	18,250	20,990	240	270	2.9	1.5
Sri Lanka	14,346	14,639	2,870	3,410	200	230	1.7	1.9
OCEANIA								
Australia	14,249	14,365	114,780	130,670	8,060	9,100	1.6	1.5
New Zealand	3,201	3,232	17,700	19,190	5,530	5,940	1.7	0.9
Fiji	607	618	900	1,040	1,490	1,690	2.0	3.1
Kiribati	56	57	50	40	830	670	1.6	4.4
Papua New Guinea	2,927	3,000	1,820	1,940	620	650	2.4	0.2
Western Samoa	154	158	n.a.	n.a.	n.a.	n.a.	1.3	n.a.
American Samoa	32	33	240	260	7,400	8,030	2.1	7.0
Solomon Islands	213	219	n.a.	n.a.	n.a.	n.a.	3.5	n.a.
Tonga	94	96	40	40	400	460	1.3	1.2
Trust Territory of the Pacific Islands	132	135	160	180	1,230	1,340	3.3	1.5
Vanuatu	103	105	50	60	530	590	2.6	1.9

Source: 1980 World Bank Atlas.

Table 2. GNP per capita and population growth

Country	*1979 GNP per capita US$*	*1970-78 Growth rate Population/GNP per capita*	
Australia	9,100	1.6	1.5
Japan	8,000	1.2	7.8
New Zealand	5,940	1.7	0.9
Singapore	3,820	1.5	6.6

Table 3(a)

Country	*GNP per capita (1979) US$*	*Growth rate (1970-78) Population/GNP per capita*	
Bangladesh	100	2.8	0.2
Bhutan	80	2.2	0.2
India	190	2.0	1.6
Nepal	130	2.3	0.3
Pakistan	270	2.9	1.5

Table 3(b) Per capita income, rate of growth of population and per capita GNP for country groups, Asia and the Pacific

Countries in the region	*No. of countries*	*Average GNP per capita U.S.$*	*Average annual rate of population growth (1970-78)*	*Average rate of growth GNP per capita 1970-78*
Less than $175-349	10	171.76	2.475	9.175
$350-749	7	562.85	2.17	3.02
$750-1,999	3*	1,263.33	2.56	3.125
$2,000-and above	6**	6,615	1.68	5.11

Note: * Except TTPI
** Except Brunei

such as, "socio-economic development tends to bring about a decline in the population growth rate".

If the data supports this hypothesis, then an appropriate conclusion is formulated.

The two sets of conclusions now become the basis for a generalization which may be stated as follows:

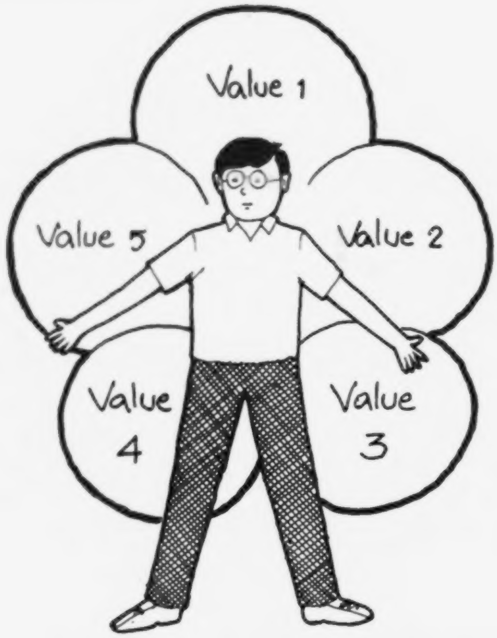
"Population growth and socio-economic development are inter-active variables – population growth could in, some ways, stimulate economic development and in some ways retard it; and socio-economic growth could bring about a decline in population growth".

Excerpted from: Unesco. "Part One: Readings on the nature and methodology of population education" *(from Multi-media, package for the training of teachers in population education)*. Bangkok. Unesco Regional Office for Education in Asia and the Pacific, 1982. p. 36-41.

VALUES CLARIFICATION AS A TEACHING METHOD FOR POPULATION EDUCATION

A THEORETICAL DISCUSSION OF VALUES CLARIFICATION AS A TEACHING METHOD FOR POPULATION EDUCATION*

Introduction



Objectives

The reader should be able to:

1. Explain the meaning, nature and purposes of values;
2. State the definition and purpose of values clarification as a teaching approach;
3. Enumerate the elements of values clarification;
4. Explain the rationale behind the use and implications of values clarification in classroom teaching of population education;
5. Apply the guidelines and sample teaching lessons on values clarification in the classroom; and
6. Realize the effectiveness of values clarification as demonstrated by research findings.

Population education is controversial and value-laden. Such population issues as when to marry, where to live, what occupation to engage in, when to have the first child, and how many children to have involve value judgements. People attach differing values to these issues. There are also many larger ethical issues that have to be considered in the proper implementation of population education.

1. Freedom

One ethical issue in population education is related to freedom. One camp believes that freedom to procreate, i.e. to have any number of children, is a basic human freedom. The Declaration of the 1968 United Nations International Conference on Human Rights guarantees this. It states that ". . . . couples have a basic human right to decide freely and responsibly on the number and spacing of their children and the right to adequate education and information in this respect". However, freedom to have children has to be viewed in terms of freedom to enjoy a decent quality of life. A World Bank survey estimated that for the total world population of about 4,000 million in 1975, 570 million were undernourished, 800 million adults were illiterate, 250 million children were not enrolled in school, 1,500 million children had no access to effective medical care, 1,300 million had less than US$ 90.00 income per year, 1,700 million had a life expectancy below 60 years, and 1,030 million had inadequate housing. Hence, another camp takes the value position that freedom to have as many children as one wants will limit man's freedom in agriculture, employment and enjoyment of recreational facilities. This camp contends that explosive population growth would mean limitation of mankind's freedom from noise, congestion and environmental deterioration.

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* This article on a theoretical discussion of values clarification has been adapted from the following publications:

[1] De la Cruz, Leonardo. *Ethical issues in population education: topics for values clarification.* Bangkok, Unesco Regional Office for Education in Asia and the Pacific. October, 1977. 6 p.

[2] Population Education Programme. *Module on the value clarification approach in the teaching of population education.* Manila, Ministry of Education, Culture and Sports, 1984. 60 p.

[3] Villanueva, Carmelita. *Value clarification on population education.* Makati: Population Centre Foundation. 1977, 126 p.

2. Economic development

In Asia, children are considered assets, especially in agricultural communities that are characterized by primitive labour and intensive means of cultivation. In many cottage industries, children provide extra income to the family. Likewise, old-age insurance is rarely available in most Asian countries, hence the reliance on children as security for old age. Many argue that when a child is born, one should look at his *two hands* that will produce and not his *one mouth* that will consume.

On the other hand, another camp contends that children are economic liabilities. This group would draw people's attention to how much one spends for food, clothing, and education, when raising children. In extreme cases, in some western countries a choice is made between having an additional child or buying a second car.

Another issue relates to whether family planning and population regulation programmes *per se* can successfully contribute to economic development and the alleviation of poverty, or whether economic development by itself leads to an alteration of fertility behaviour. In this second view, it is only when an improved total environment is created that family planning and population activities can hope to succeed.

3. Politics

Family planning and population regulation efforts have been looked upon as a systematic way of exterminating various ethnic groups. There are also fears arising from the fact that population regulation may ultimately reduce a country's manpower relative to another, especially for the purpose of defence.

4. Distributive justice

On the micro level of analysis, there is the ethical issue of who should bear the burden of reducing family size. Some people say that only the financially poor and those genetically inferior (including those with a low intelligence quotient should not have more children). In other words, those who can afford to, can have as many children as they want. In fact, this group thinks that the highly intelligent, handsome, and beautiful should in fact procreate more for the sake of improving their race, if not mankind.

On the other hand, there is another group who thinks that the burden of reducing family size is the responsibility of all – rich and poor, intelligent or dull, and beautiful or ugly.

A related issue is whether only the developing nations, not those that are highly developed, need to do something to arrest population growth.

Those in less developed countries point out that the developed countries, with much less of the total population, are consuming a large share of the world's resources. It has been calculated that the "richer 19 per cent of the earth's population controls 64.5 per cent of the world's gross national product. On the other hand, 1,400 million of its inhabitants, representing seventy nations with 32.6 per cent of the population of the planet, control a mere 4.4 per cent of the total wealth". (Echeveria) Is the problem not one of redistribution of wealth, rather than regulating population growth?

5. Population education

Making people adopt measures for limiting family size is not easy, considering all the above issues and dominant familial values. Population control programmes that have an element of disguised coercion in any form have a scant chance of becoming effective. Instead, a longer lasting and more effective way of regulating population growth is through a re-orientation of values and attitudes – particularly of the young, who will be the parents of tomorrow. This can be done through education. Education thus views population, not as a problem to be solved, but as a phenomenon to be understood. It cannot prescribe solutions which might violate people's beliefs and values. In teaching population education, then, a special strategy is needed.

Values clarification

The basic assumption of a value-fair situation is that there are no population-related decisions or actions which are by nature "right" or "wrong". In this situation, it is the task of the educator to provide content (both factual information and information relating to different value positions) which will enable learners to evaluate the range of options for a given issue. This does not mean that the educational process will be bias-free, but rather that the biases and related attitudes and values will be identified and open to evaluation.

The educator's obligation is to present content in a value-fair manner, to make clear the reasons for his own opinions and encourage other positions to be developed and defended; it is the learners' responsibility to ascertain their own positions, make their decisions and determine their actions. As long as their judgements are arrived at by a process of conscious and informed evaluation and decision-making which takes into account personal and social consequences, their attitudes, decisions and actions will in no way be pre-ordained. (Unesco)

Research has shown that through value clarification, students have learned to use both rational thinking and emotional awareness to examine their personal and social values. Moreover, they have also acquired skills to resolve value conflicts and to act according to their value positions and choices.

According to Simon, Howe and Kirschenbaum, value clarification is designed to engage students and teachers in the active formulation and examination of values. It does not teach a particular set of values. There is no sermonizing or moralizing. The goal is to involve students in practical experiences, making them aware of their own feelings, their own ideas, their own beliefs, so that the choices and decisions they make are conscious and deliberate, and are based on their own value systems.

Ideally, our decisions will be made on the basis of our values. A crucial question, therefore, that we must ask ourselves before making a decision is: "Are we clear about the values we hold?"

For population education teachers, this matter has great significance, as the ultimate objective of population education is to teach students to make rational decisions regarding population issues.

Meaning of values

We begin with the statement that values influence the behaviour patterns of an individual. Values are standards, criteria, or guidelines which determine how men act upon available choices. Explicitly or implicitly, men regard each thing as either good or bad, true or false.

They are standards, criteria, or rules which give direction in determining how people act. They are reflected in specific judgements or claims people make and in the worth they place on the different aspects of life. Values are the final goal of all our intentions. They are things we have chosen and affirmed through consistent action.

Values develop from the experiences we have, from the influence of people and conditions around us. Values influence our actions, and the consequences of these actions in turn influence our values. All exchanges with the environment are value-laden. All human acts are determined by one's set of values. Whenever decisions are made, choices are ordered, or preferences expressed, then values come into play.

One's goals, convictions, interests, attitudes and feelings are all termed "value indicators", that is, they indicate the presence of potential values. Other value indicators are the activities an individual undertakes as well as the worries, problems and obstacles that concern him.

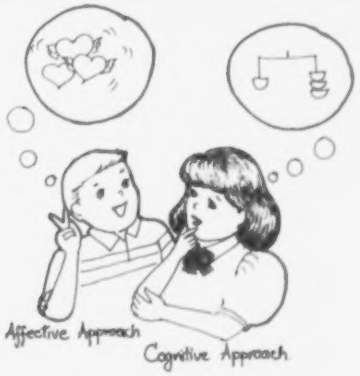
To summarize:

- ☐ **The decisions we make in life are based on our values.**
- ☐ **Therefore, an important question to ask is:**
  "Are we clear about the values we hold?"
- ☐ **Values are standards, criteria, or rules which give direction in determining how people act.**
- ☐ **Values are the final goal of all our intentions.**

Elements of values clarification

1. Cognitive Vs. Affective Approach

Some value clarification strategies emphasize the affective process, based on the premise that values are more easily developed subjectively and through empathy. Other strategies stress the cognitive process, as values are considered products of thinking rather than feeling.



Values may be acquired in two ways. The first involves mental processes, which fall into the cognitive domain. Here the child acquires values by conceptualizing what is desirable, then being rewarded for engaging in appropriate behaviour. All that is needed to teach values is to define or illustrate what is desirable and then reward behaviour which is consistent with the description. But before the child responds or chooses a certain value, he has to go through a process of analysis. This involves cognitive operations, such as making judgements, hypothesizing, testing positions or clarifying a problem. Things are judged as good or bad, depending on whether or not they conform with the prescribed behaviour. In this type of value clarification approach, activities are designed, not to arouse feelings, but to present information for analysis.

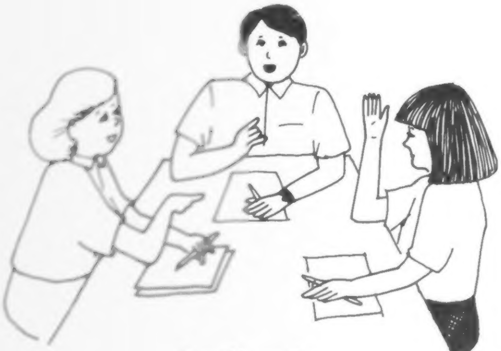
Those strategies which deal with cognitive processes involve activities which, "define, state, defend, explain, generalize, predict, analyse, compare, test, select, examine, summarize, or support.

The second way in which values may be acquired has to do with the affective domain. The key element is establishment of a warm, supportive relationship wherein empathic identification takes place between the child and an individual or model. The child receives his reward by behaving according to the values of the "significant others" in his environment. The child acquires values because he is able to feel as others do. In this kind of approach, the child is asked how he "feels" and how he thinks another would feel under the same circumstances. Cognition is involved only to the degree that it makes the person aware of the feelings of others; and affect is involved to help establish empathy with others.

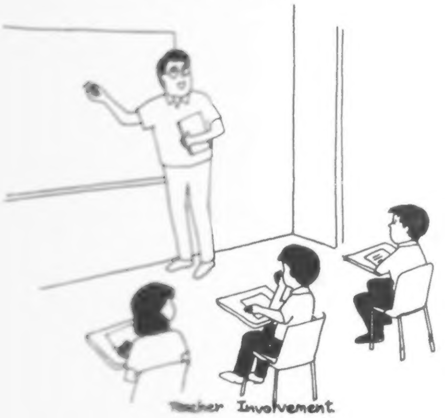
Those strategies which deal with affective processes involve activities which "describe, identify, qualify, differentiate, feel, make aware, receive, respond, or value.

2. Student-Teacher Involvement

Different degrees of student-teacher involvement can be used with the values clarification approach. Some strategies are better facilitated if the students discover their values by themselves, without any help from the teacher. Other strategies require minimum teacher participation to facilitate implementation of major activities by the students.



Peer Discussion



Teacher Involvement

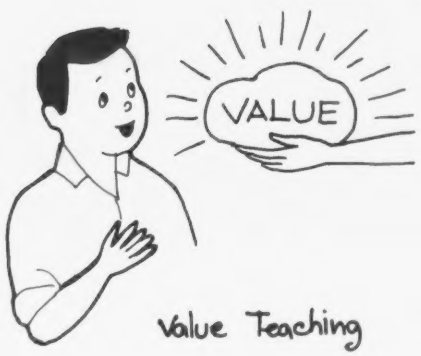
In any teaching-learning situation, various degrees of student-teacher involvement can be ranged along a continuum, with teacher-centred at one extreme and learner-centred at the other.

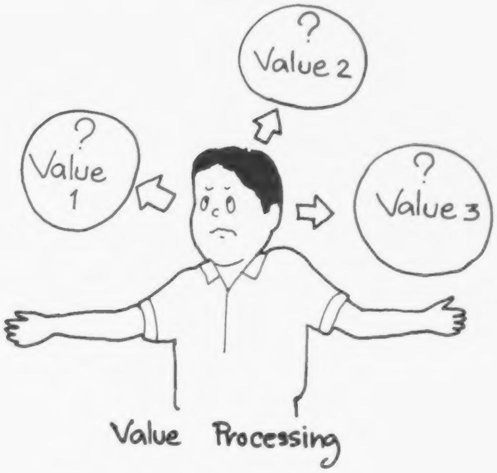
A value clarification strategy falls on the learner-centred side of the continuum. It seeks to help the students make value choices for themselves by judging, differentiating, and reaching a defensible decision. But within a student-centred approach, there are various degrees of student involvement. One extreme is a value clarification strategy implemented by the students themselves without any help from the teacher. An example is the use of value sheets by small groups of students without the presence of a teacher.

Another strategy has a greater degree of teacher participation. The teacher undertakes thirty to fifty per cent of the classroom activities. His role includes: (a) facilitating discussion by raising follow-through questions; (b) insuring that all alternatives are given; (c) encouraging exploration of the consequences of alternatives; and (d) seeking clarification and probing answers. In short, he tries to create conditions which will encourage students to identify issues, state hypotheses, clarify, probe, and, if possible, resolve conflicting ideas and opinions. But even if the leader oversees the valuing processes, the situation is still largely student-dominated.

3. Value Teaching Vs. Value Processing

The kind of outcome desired determines how value clarification should be implemented. Some strategies consider value processing as an end in itself: students do not arrive at a common value but are required to undertake the valuing process successfully. Other strategies require that students arrive at a value decision after considering a proposed set of alternative values. A more closed-ended strategy calls for resolution of conflicts among students.





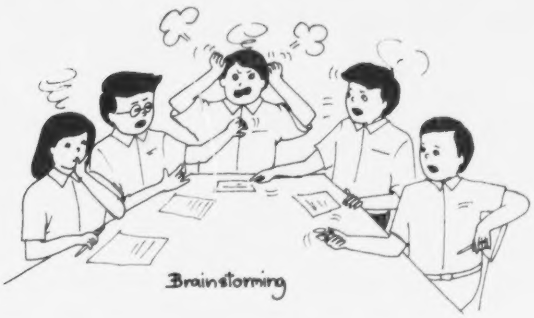
Various schools of thought exist on this issue. One of these is called ethical or moral relativism. Relativism means that one person's values are as good as another's; everyone is entitled to his own opinion. There is no way of proving whether one opinion is better than another.

This school of thought says that students should be free to decide their own values. It claims that precisely because there is no truly universal set of values, and because present values are changing rapidly, the only productive activity for teachers is the teaching of value clarification or processing skills. Although it is agreed that educators may present a list of values to students, such a list should not be prescriptive.

Those who oppose ethical relativism contend that: (a) relativism does not provide a consistent basis for guiding lives – a basis which value clarification wishes to supply; and (b) it does not give a satisfactory method for resolving interpersonal conflicts. But there *are* times when conflicts must be resolved, over issues of war, racial balance, abortion, and other problems. How, then, does one choose among the various resolutions of the conflict, if one has been raised as a relativist?

4. Verbal Vs. Written

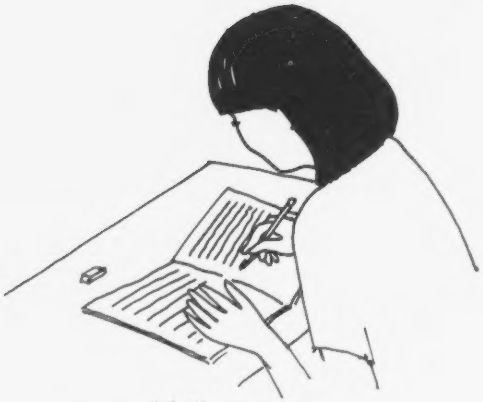
Various resources and devices can be used to facilitate value clarification. Strategies based on the assumption that valuing is a private and personal activity must be carried out through writing or self-instruction. Other strategies, based on the premise that values are acquired through experience, require that valuing be undertaken through simulation and role-playing. Still other strategies require that valuing be done through discussions and verbal exchanges, to expose students to others' thinking and alternative values.



Brainstorming

Materials and devices used in value clarification may include instructional media, simulation, role-playing, games, value-sheets, brainstorming, interviews, values grid, open-ended questions, and questionnaires.

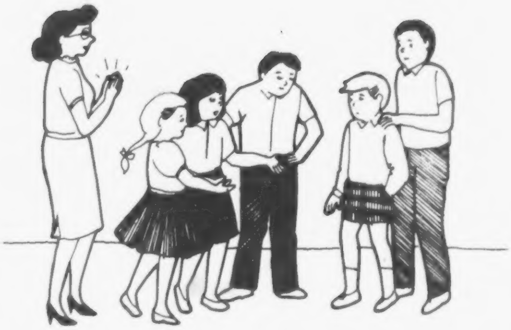
Some educators believe that intensive group discussions or verbal exploration of alternative positions can best help students arrive at value choices. They reason that discussions, brainstorming, small-group sessions, or verbal exchanges enable the student to explore his feelings and thoughts about an issue in relation to another's. He thus gains a wider perspective on the value in question and more confidence in his choice, as well as greater understanding of others' choices. Discussion also gives students new alternatives and ideas.



Written

Others believe that the best strategy for helping students resolve their own dilemmas is to let them write down their arguments and positions. This is called the paper-and-pencil approach. They say that a value discussion tends to move toward heated arguments. The participants then become defensive and try to hold on to their original positions. Deciding on values, however, requires a non-defensive, open, and thoughtful climate.

For these reasons, it is claimed that the most effective method is to make the students respond to questions privately. Writing will elicit more careful thought than just speaking out about something. Students who are afraid to speak out and take an open stand during a discussion can then pour out their thoughts and feelings in writing.



Role - Playing

A third camp says that the best way for students to clarify their values is by providing them experiences. One of the barriers to rational decision-making about values is the limited life experiences of a child. This strategy is based on the assumption that we cannot learn certain values until we have been exposed to experiences which involve these values. Simulating, gaming, or role-playing particular situations from real life thus gives the students a deeper form of value acquisition.

Guidelines for Teachers

1. *View yourself as a facilitator of learning rather than an expert on values.*
2. *Before using a value clarification activity with your students, take time to go through it carefully. Then, if possible, test it with a small group before using the activity with a large group.*
3. *Establish rapport with the group and create a climate in which individuals feel safe to explore their values. A classroom atmosphere of openness, trust, honesty, and acceptance as well as respect for others should prevail.*
4. *Emphasize this basic gound rule of value clarification: people are to share only what they feel comfortable in sharing. Whenever students do not want to respond, they should be allowed to pass. It should also be stressed that there are no wrong answers.*
5. *Encourage students to strive to listen to and understand one another and not to moralize or criticize one another.*
6. *Participate in the exercises and discussions whenever possible. Be aware of your value biases and do not impose your values on others. In other words, be non-judgemental.*
7. *Ask questions that are likely to explore values effectively.*

Three categories of questions that a teacher may ask

a) ***Factual questions.*** They are aimed to determine knowledge of factual data. Students are asked to make assertions about the observable world.

What happened?

What did they do?

Who was involved in the incident?

b) ***Definitional questions.*** They are used to find what meanings students attach to a certain term or phrase used. Examples of such questions are:

What do you mean?

Can you give an example?

What characteristics must a thing possess to qualify as a ________?

c) ***Inferential questions.*** These are the questions that ask students to go beyond the data previously acquired. They lead students to: (a) reflect on and analyse facts; (b) explain possible relationships that they think exist among facts; (c) identify feelings; and (d) make "reasoned guesses" as to how something will turn out. Such questions may be as follows:

What caused him to do that?

How did he feel?

What conclusions can you draw from this?

What would you say he considers important?

If he had done that, what might have happened?

Indicated in the outline below are the responses called for by the three categories of questions we have just mentioned.

Responses

Factual Types	***Definitional Type***	***Inferential Type***
Names	Characteristics	Conclusions
Dates	Examples	Alternatives
Places	Meanings	Generalizations
Events		Importance
Descriptions		Feelings
		Hypotheses

To draw these responses, you may use certain questioning patterns. When the same question is asked of several students, you call that pattern horizontal extending.

Question A

What did Johnny find inside the portfolio?

Student 1 — Student 2 — Student 3

In the case of a *vertical extending* questioning patterns, a series of questions are directed to one student at a time.

Student 1

Question A
What did Johnny find inside the portfolio?

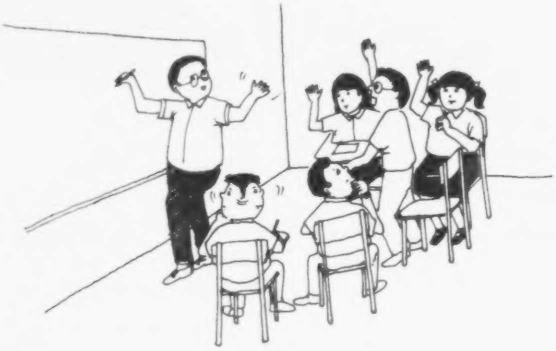
Question B
What is meant when we say that Johnny pondered on what to do after he found the portfolio?

Question C
How did Johnny feel about the decision he made?

The questioning patterns will have more meaning when we compare and contrast values. When we compare and contrast values of different students in the same situation, the horizontal extending pattern is used. The vertical extending pattern is used when comparing and contrasting the values of the same individual in different situations.

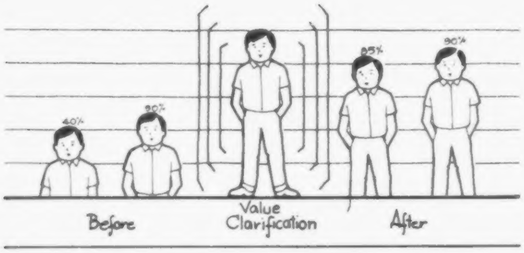
What research says: implications for classroom teaching

1. Attitudinal change



Students, given the opportunity to clarify their values or to undergo the value clarifying process, showed improvement in their attitudes towards learning. They became more committed to and more purposefully, consistently and constructively involved in school work.

2. Knowledge gain



Students given the opportunity to clarify their values in the classroom showed improvement in grades and gain in knowledge.

3. Behavioural change

When the valuing process was instituted among children described as apathetic, indecisive, over-conforming, inconsistent, flighty and lacking value clarity, these types of behaviour became noticeably less acute and less frequent.

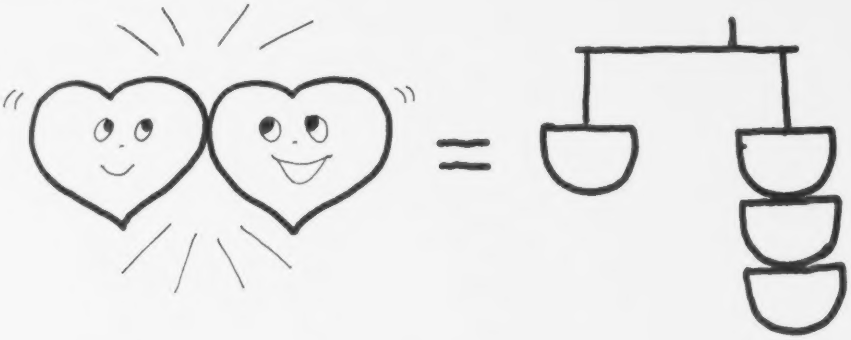
4. Others

The effectiveness of the value clarification strategy depends to some extent on the following: (a) the personality and mental ability of the students; (b) the competence and personality of the teachers; (c) on administrative support and sanction; and (d) and the degree of controversiality and value content of activities and their appropriateness to the level of maturity and competence of the students.

The processes young people go through in sorting out and clarifying their values and deciding which ones they truly believe is in itself an experiential process in personal growth. The experience is a building block towards the development of identity.

In the classroom setting, value clarification promotes team building and conflict resolution. When the students probe alternatives and analyse consequences of decisions, the experience is an opportunity for developing group cohesiveness and sharing. This leads to a classroom atmosphere where both students and teacher view conflicts as normal and strive to resolve them.

Value clarification stimulates among students an active search for relevance. In other words when students go through the value clarification process, they are, in effect, seeking congruence of their personal values and behaviour with the social and cultural requirements of their environment.

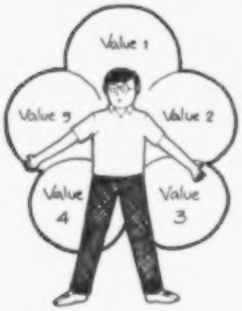


SAMPLE LESSONS ON VALUES CLARIFICATION

VALUING PROCESS

by

Raths, Harmin & Simon*



Objectives

The student should be able to:

1. Consider and make choices freely from a set of alternatives in order to arrive at a decision; and
2. Internalize, cherish and act upon the value resulting from a choice made.

Procedures

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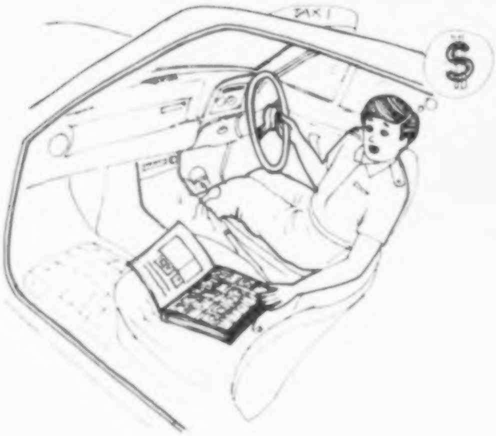
1. Choosing freely

Above all, there should be no enforcement of authority or coercion when a person is making a choice. It is when a person chooses freely that he is likely to cherish, prize and put significance in a belief, a goal, or an activity. Below is a story for students to read, which illustrates this point.



Johnny finds a portfolio in a taxicab he is driving, presumably left by a passenger. He opens it and finds a booklet of traveller's checks, some cash, and some important documents. He ponders what to do. Then he decides to look for the rightful owner through a radio/TV public service programme. Turning over the lost article to its owner gives him a happy feeling.

The teacher should ask the students:

"Did Johnny choose to return the lost article freely? Why do you say so? Could he have kept it?

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2. Choosing from among alternatives

This criterion is very much related to the first. A choice is only possible when there are alternatives from which to select. There should be more than one alternative to choose from before this criterion can be made applicable in considering an interest, a purpose, or an activity a value.

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* Raths, Louis E., Merril Harmin and Sidney B. Simon. *Values and teaching : working with values in the classroom.* Ohio, Charles E. Menil Publishing Co., 1966.

Ask the students, "In the example of Johnny, did he have alternatives to choose from? What were they?"

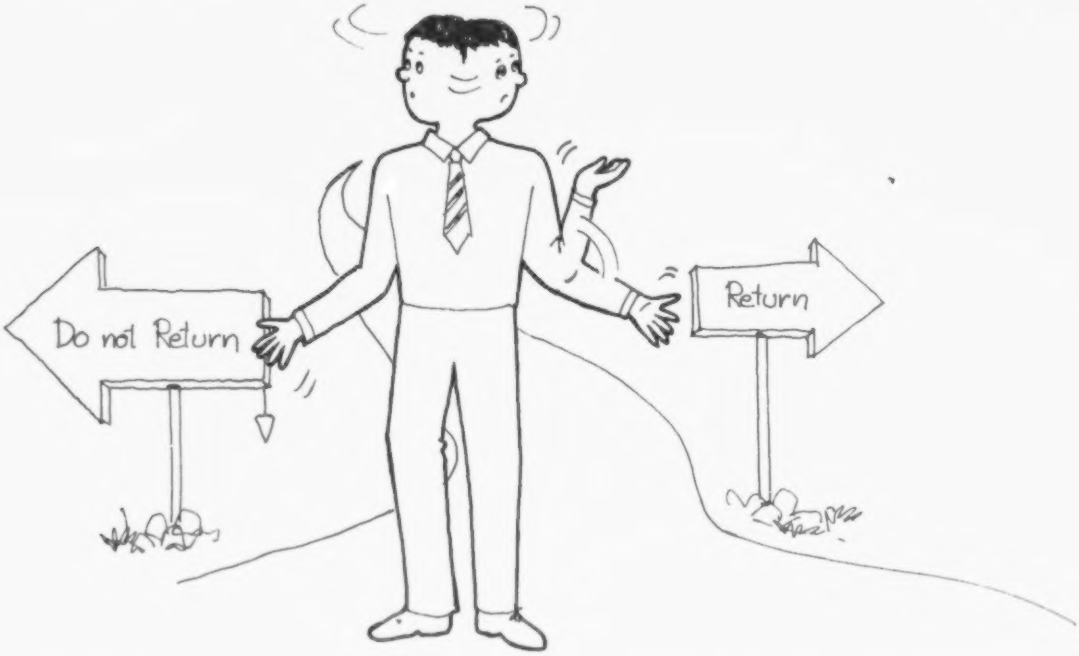
You might say his alternatives are:

Alternative No. 1	Alternative No. 2	Alternative No. 3
Keep and use the money to meet the needs of his children at the opening of the school year.	Return the documents and keep the money (he could make up a story about the money).	Return the portfolio to the owner.

Now have the students relate this story to their own lives, by asking:

"Can you think of situations in your life where you made a choice about something from among a number of choices available to you?"

3. Choosing after thoughtful consideration of the consequences of each alternative



It is not enough that a choice is made freely from among alternatives. The consequences of the alternatives should also be considered in making the choice. It is only when the consequences of alternatives are analysed and clearly understood that an intelligent choice is likely to be made and transformed into a value.

Applying this criterion to the example given, Johnny, in order to reach a meaningful decision, must devote serious thought to the consequences of the alternatives available to him. He must ask himself these questions: What if he kept the money and used it to meet his family's needs?

Would he have been able to live with his conscience? If he returned the lost article, how would he feel about his decision?

4. Prizing and cherishing

You cherish or prize something you have a feeling for. Values develop from choices people are happy to make. Prizing and cherishing mean that a person is satisfied and is glad with the choices he had made which he will use as guidelines in his daily life.

5. Affirming

This is a consequence that results when choices are prized and cherished because it is only then that one is willing to be associated with them. If one is proud of a choice and is willing to affirm it publicly, that choice has complied with another value requirement – affirming.

Ask students the following questions:

"In the situation cited above, how did Johnny affirm his value – honesty? Recall situations in your own life which illustrate public affirmation of a value or values you hold. Would you have acted similarly in other situations?"

6. Acting upon choice

This sixth criterion is very significant because it is in acting that a choice is given substance. Choosing freely from alternatives and cherishing such a choice should culminate in an action. The following comments will demonstrate this.

"We have seen the value of honesty actualized in Johnny's behaviour. The behaviour was his act of locating the owner through a radio/TV service programme. Can you cite similar situations in your life where your actions/behaviour did, in fact, reflect values you cherish?"

7. Repeating

This is the last step in the process of internalizing values. Values must repeatedly be manifested in a person's way of life. A person who acts with consistency and persistence holds firm values. Continue as follows:

"Let us extend Johnny's example. In what other situations may Johnny's honesty be reflected?"

To review what you have read above, we see values as based on three processes: ***choosing***, ***prizing***, and ***acting***.

Choosing:
(1) Freely
(2) From alternatives
(3) After thoughtful consideration of the consequences of each alternative

Prizing:
(4) Cherishing, being happy with the choice
(5) Willing to affirm the choice publicly

Acting;
(6) Doing something with the choice
(7) Repeatedly, in some pattern of life

These processes collectively define valuing. The results of the valuing process are called values.

Below are questions which the teacher can use in dealing with the students' responses to this story or similar situations in their own lives.

Clarifying responses suggested by the seven valuing processes

1. Choosing freely

a) Where do you suppose you first got that idea?
b) How long have you felt that way?
c) What would people say if you weren't to do what you say you must do?
d) Are you getting help from anyone? Do you need more help? Can I help?
e) Are you the only one in your crowd who feels this way?
f) What do your parents want you to be?
g) Is there any rebellion in your choice?
h) How many years will you give to it? What will you do if you're not good enough?
i) Do you think the idea of being the centre of attention has anything to do with your choice?

2. Choosing from alternatives

a) What else did you consider before you picked this?
b) How long did you look around before you decided?
c) Was it a hard decision? What went into the final decision? Who helped? Do you need any further help?
d) Did you consider another possible alternative?
e) Are there some reasons behind your choice?
f) What choices did you reject before you settled on your present idea or action?
g) What's really good about this choice which makes it stand out from the other possibilities?

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3. Choosing thoughtfully and reflectively

a) What would be the consequences of each alternative available?

b) Have you thought about this very much? How did your thinking go?

c) Is this what I understand you to say . . . (interpret his statement)?

d) Are you implying that . . . (distort his statement to see if he is clear enough to correct the distortion)?

e) What assumptions are involved in your choice? Let's examine them.

f) Define the terms you use. Give me an example of the kind of job you can get without a high-school diploma.

g) Now if you do this, what will happen to that . . .?

h) Is what you say consistent with what you said earlier?

i) Just what is good about this choice?

j) Where will it lead?

k) For whom are you doing this?

l) With these other choices, rank them in order of significance?

m) What will you have to do? What are your first steps? Second steps?

n) Who else did you talk to?

o) Have your really weighed it fully?

4. Prizing and cherishing

a) Are you glad you feel that way?

b) How long have you wanted it?

c) What good is it? What purpose does it serve? Why is it important to you?

d) Should everyone do it your way?

e) Is it something you really prize?

f) In what way would life be different without it?

5. Affirming

a) Would you tell the class the way you feel some time?

b) Would you be willing to sign a petition supporting that idea?

c) Are you saying that you believe . . . (repeat the idea)?

d) You don't mean to say that you believe . . . (repeat the idea)?

e) Should a person who believes the way you do speak out?

f) Do people know that you believe that way or that you do that thing?

g) Are you willing to stand up and be counted for that?

6. Acting upon choices

a) I hear what you are for; now, is there anything you can do about it? Can I help?

b) What are your first steps, second steps, etc?

c) Are you willing to put some of your money behind this idea?

d) Have you examined the consequences of your act?

e) Are there any organizations set up for the same purpose? Will you join?

f) Have you done much reading on the topic? Who has influenced you?

g) Have you made any plans to do more than you already have done?

h) Would you want other people to know you feel this way? What if they disagree with you?

i) Where will this lead you? How far are you willing to go?

j) How has it already affected your life? How will it be affected in the future?

7. Repeating

a) Have you felt this way for some time?

b) Have you done anything already? Do you do this often?

c) What are your plans for doing more of it?

d) Should you get other people interested and involved?

e) Has it been worth the time and money?

f) Are there some other things you can do which are like it?

g) How long do you think you will continue?

h) What did you not do when you wanted to do that? Was that o.k.?

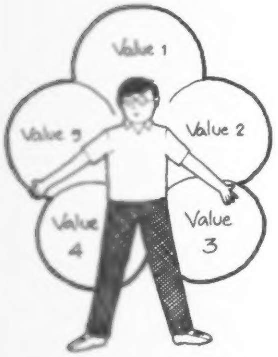
i) How did you decide which had priority?

j) Did you run into any difficulty?

k) Will you do it again?

Excerpted from: Population Education Programme. *Module on the value clarification approach in the teaching of population education.* Manila, Ministry of Education, Culture and Sports, 1982, p. 3-12.

VALUES PROCESSING ON FAMILY SIZE



Objectives

The student should be able to:

1. Understand the many contradicting values related to population education;
2. Choose freely from these contradicting values and adopt those which he feels comfortable with; and
3. Determine one's values with regard to family size.

Procedures

1. Choose freely

By and large, the birth of a child is the product of a series of free choices. To begin with husband and wife choose each other. Fortunately, with the advent of modern science, to have or not to have a child, or to have a big or small family is no longer beyond man's free choice. Death may be beyond his power to prevent, but not birth or conception.

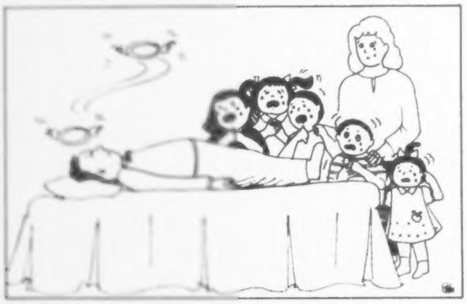
2. Choose from alternatives

Values clarification relies on the wisdom of learners to choose between conflicting values. Values clarification is, however, especially necessary in population education, as both pro-natalist and pro-big family size positions could be rationalized. To undertake a discussion on this, the teacher can follow a set of arguments as stated below:

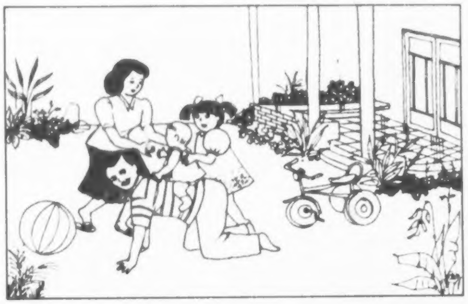
Rationalization for:

Big family size **Small family size**

a) Health Value

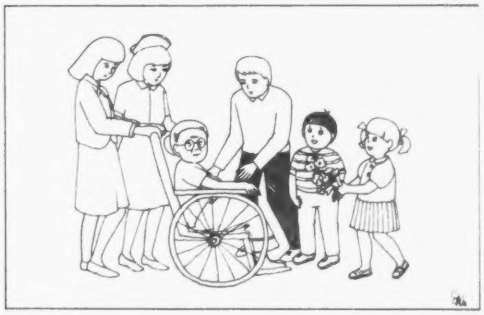


Children often die. Since children often die, it is necessary to have more children to make sure that someone will inherit the family wealth.

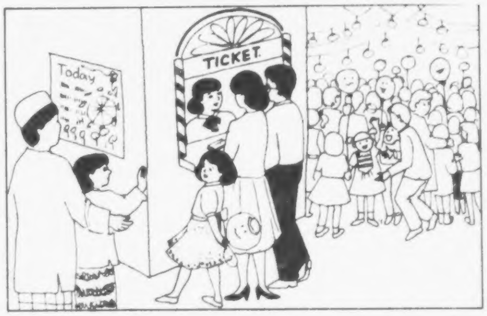


Family health is ensured. The mother's health is preserved. Father need not work so hard to be able to provide more than enough for the family.

b) Economic Value

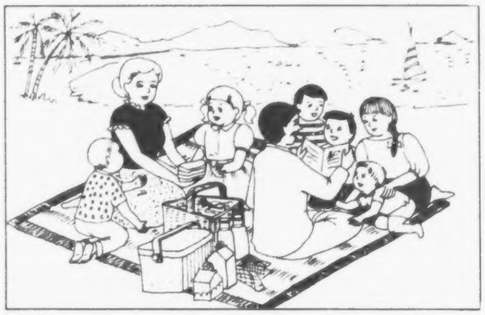


Economic asset and security for old age; children are economic assets and are social security for old age.

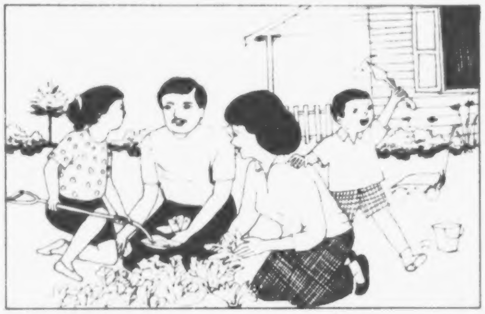


Higher standard of living. Living expenses are less when you have a small family. The family can save to have consumer goods plus money for recreation.

c) Family Welfare Value

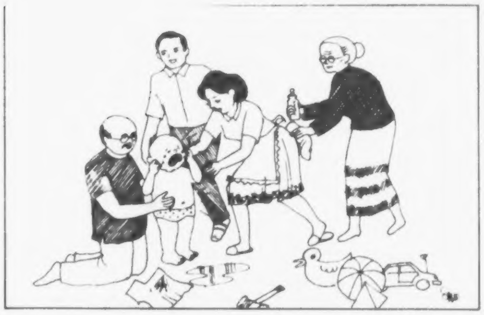


Big families are educative and happy. The bigger the family the more chances to learn from one another. Furthermore, big families are happy families.

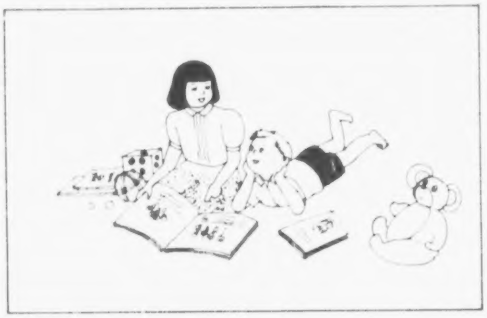


Better child rearing and tensionless families. Children are considered "jewels," not nuisances, hence reared better. There is no tension brought about by insufficient resources in the family.

d) Marriage-Related Value

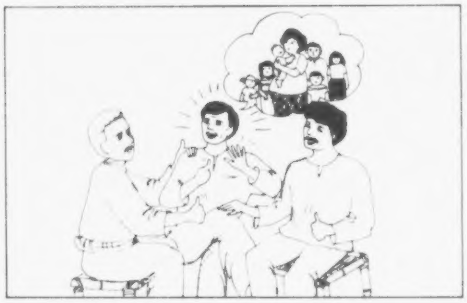


An only child is a spoiled child. Children from smaller families are prone to adjustment problems, hence less likely to easily adjust with their future spouses.

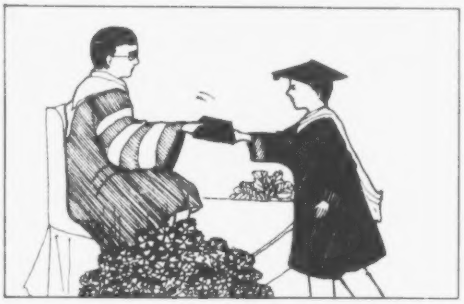


Happy dispositions. Children from smaller families are more unlikely to suffer tension while being brought up, hence are likely to have happy dispositions.

e) Personality-Related Value

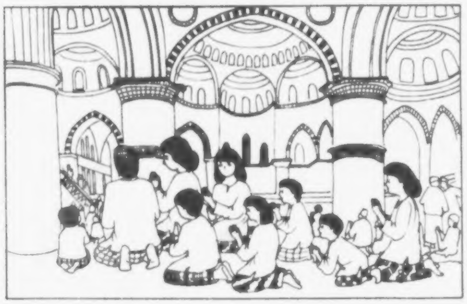


Ego support. The more children, the more husbands are able to demonstrate their virility and manliness.

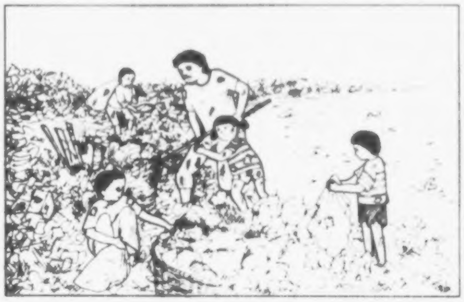


Self-actualized. The less the number of children, the more likely will they realize their ambitions.

f) Moral Values

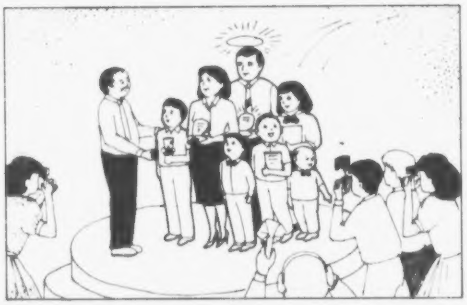


God's will. Large families are God's blessing

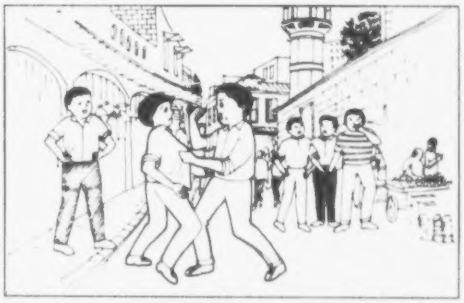


Morally irresponsible. A person who has more children than he can decently bring up is morally irresponsible.

g) Social Values



Attribute of status. Parents of the year awardees are those who have many successful children.



Social problem. Parents with big families are likely to add to social problems.[1]

The conflicting rationalizations presented above show why the choice between small and big family size becomes difficult to make in the context of developing societies, to which many students in the Asia and Pacific region belong.

3. Choosing after thoughtful consideration of consequences

The advantage of value clarification is that it allows learners to use both rational thinking and emotional awareness in examining human behaviour, in this case, man's fertility-related behaviour. The learners are led to analyse the consequences of the choice of each of the alternatives, with reference to their own lives. To follow through the discussion in step 2, the teacher can ask the students the following questions:

Choice of bigger family	**Choice of smaller family size**
1. Health Values	
How will it affect the health of my wife, myself, and our children?	If I only have one, what happens if he/she dies? Who will inherit my wealth?
2. Economic Values	
Can I afford it? Can I provide food, clothing, education – a brighter future for them?	Who will take care of my wife and myself during our old age? Who will help me in my farm/family business?
3. Religious Values	
Will God really help me provide for all the children that he will bless my marriage with?	What will people say if I have only one child? Will they brand me as weak or simply stingy?

4. Prizing and cherishing

Values do not include only rational choices, but feelings as well. When feelings are added to one's rationalization of fertility-related values, then one becomes fully aware of what he/she prizes and cherishes. The teacher asks the students whether the values they have discussed are ones that they prize and cherish.

5. Publicly affirming

If one considers a value important, such as the preference for small family size, then he/she will not be ashamed to talk about it publicly, not only to help further clarify his own values but, more important, to help others clarify their own fertility-related values. The teacher suggests that to publicly affirm the values developed, the students should strive to disseminate them to as many people as possible.

6. Acting

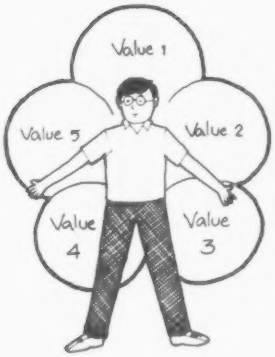
"The proof of the pudding is in the eating", is a saying that applies here. In family planning there is always a gap between knowledge, attitude and practice. It is only when the learners get married that they can prove if, in fact, a small family size norm has been internalized by them.

7. Pattern of life

Fertility related values are not and should not be independently reflected and derived. They must be part of the overall development goals of families, communities and nations. Fertility-related values must be seen as a part of the overall pattern of life of the people. This should not only be the ultimate goal of values clarification, but of population education as well.

Excerpted from: **Unesco. Part One: Readings on the Nature and Methodology of Population Education (from Multi-media Package for the Training of Teachers in Population Education). Bangkok, Unesco Regional Office for Education in Asia and the Pacific, 1982, p. 42-46.**

POPULATION EDUCATION: TEACHING PROCESS FOR TEACHING A MORAL DILEMMA*


Value 1
Value 2
Value 3
Value 4
Value 5

Objectives

The student should be able to:

1. Develop skills for handling ethical issues on population education; and
2. Confront a moral dilemma between two opposing views regarding family size.

Procedures

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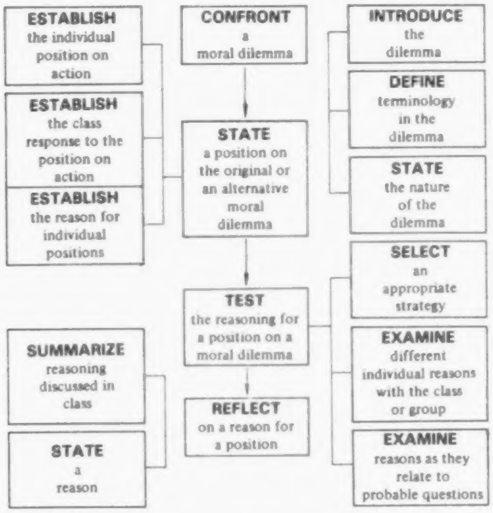
1. Introduction

Whether we like it or not, family planning constitutes a moral dilemma for many individuals. Galbraith and Jones developed a model for "Teaching Strategies for Moral Dilemma" (See diagram below) which is quite applicable to the handling of ethical issues in population education. The teacher first presents and discusses the model.

Diagram of the teaching process for teaching a moral dilemma


ESTABLISH the individual position on action
ESTABLISH the class response to the position on action
ESTABLISH the reason for individual positions
CONFRONT a moral dilemma
STATE a position on the original or an alternative moral dilemma
TEST the reasoning for a position on a moral dilemma
REFLECT on a reason for a position
INTRODUCE the dilemma
DEFINE terminology in the dilemma
STATE the nature of the dilemma
SELECT an appropriate strategy
EXAMINE different individual reasons with the class or group
EXAMINE reasons as they relate to probable questions
SUMMARIZE reasoning discussed in class
STATE a reason

Source: Ronald E. Galbraith and Thomas M. Jones, "Teaching Strategies for Moral Dilemmas". *Social Education*, January, 1975.

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[*] Adapted by Leonardo de la Cruz.

2. Confront a moral dilemma

a) In introducing a moral dilemma, the teacher starts by presenting two points of view:

View No. 1	*View No. 2*
Large families are God's will. It is a sin to limit one's fertility. ***Large families promote morality and help prevent divorce or infidelity.***	***It is a mortal sin to beget children that one cannot feed.*** ***Large families promote immorality. Either husband or wife is lured into easy money, if only to support a big family.***

b) Definition of the dilemma

These views are divergent and constitute a dilemma for those who believe that there is an element of truth to both. To one who has internalized either of the two value positions, however, there is no dilemma.

c) Statement of the nature of the dilemma

It appears from the two opposing views that, as Lucretius once said, "What is food to one man may be fierce poison to others". The problem boils down to:

1. *Which view should one take? Why?*
2. *How does one justify taking one position in preference to another?*

3. State a position on the original or alternative dilemma

a) Establishment of the individual position

The teacher encourages individual students to take a stand, guided by their own convictions.

b) Establishment of the class response to the position

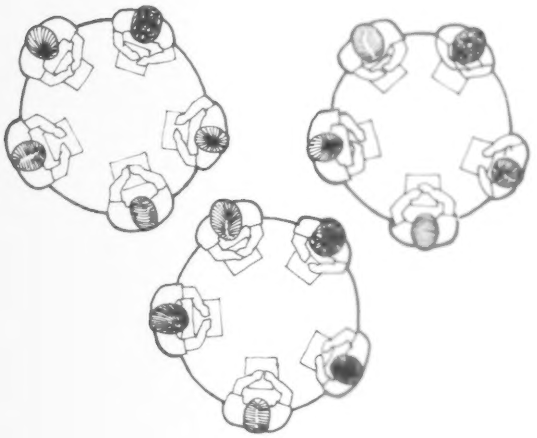
The teacher motivates the students to make an assessment of the overall position of the class. A good test to determine how controversial the issue is, is the extent to which the class is divided. To insure a lively, intelligent and/or affectively loaded discussion, the teacher must present more arguments to strengthen the apparently weaker position.

c) Establish the reasons for individual positions

To crystallize their thoughts, the students discuss the issue, and then write their own rationale for a position taken. Making students write their own positions and reasons will insure that everyone is involved, and not just those who are more active during class discussions.

4. Testing the reasoning for a position in the dilemma

Galbraith and Jones say, "This is the most important step in the teaching process. It gives the members of the class an opportunity to test their reasoning against others. Each class session



usually involves a full class discussion; however, deploying students in small groups for several minutes can help to involve more students in the discussion. It also generates additional reasons, and helps to focus on the 'best' reasons for action. Meeting in small groups prior to a full discussion gives a person a chance to (prepare) for an exchange among class members. The task of the small group usually involves the preparation of a defense for a particular position by listing all of the best reasons for recommending a specific action".

a) Select an appropriate strategy

One strategy is to divide the class into two main groups. The members of each group are those in agreement with one of the two views in the situation.

b) Examine different individual reasons within the group

Let each member of the group enumerate all his reasons for an action. Find out if these are common reasons. Let the group agree on the three most important reasons for a given action on the dilemma, arranged in a hierarchy of significance.

The different groups list their reasons on the blackboard. These are explained. Encourage the members of the opposing group to challenge the reasons given by the other group.

c) Examine reasons as they relate to the problem

Make sure that the class members relate their reasons to the basic problem under consideration.

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5. Reflect on the reasons for a position

This part of the valuing process has two sub-steps, namely: (a) summarizing the reasoning discussed in class, and (b) stating a reason.

a) Summarizing the reasoning discussed in class.

Encourage the students to reflect on the pros and cons of each value.

The teacher may also ask the students if they think there is a "right" answer to the moral problem. The teacher may provide the student an opportunity to introduce new reasoning or materials at this point.

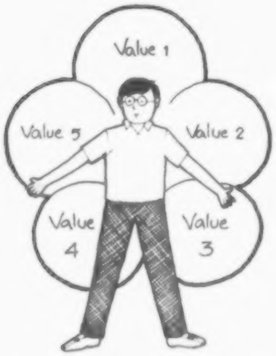
b) State a reason.

It is hoped that at the end of the lesson, every student will arrive at a defensible view, which is well reasoned out. Ideally, the whole class should come up with one position, but this is not often possible with a difficult moral dilemma. It is not unlikely, then, that the students will leave the classroom still wondering about the best response to a difficult moral problem.

It is only in a valuing climate that real decision-making can take place. The decision becomes one that is of the students, by the students and for the students. And since it is the choice of the students, they will be committed to whatever position they take.

Excerpted from: Villanueva, C.L. *Value clarification on population education.* Makati, Population Centre Foundation, 1977, p. 52-55.

FOUR PHASES OF VALUES CLARIFICATION: ITS APPLICATION TO POPULATION EDUCATION*



Objectives

The student should be able to:

1. Develop skills in using values clarification in comprehending and conceptualizing knowledge about population education.
2. Understand the relationships between rapid population growth, food, income and health through the process of values clarification.

Procedures

1. Introduction

First, the teacher should provide a description or explanation of the four phases of values clarification that the students will later on undertake.

J. Doyle Castell and Robert J. Stahl define value clarification as "verbal statements by students that can be used as a basis for inferring that students are comprehending, conceptualizing, and personalizing knowledge about humanity, society, belief and culture"[1]. These authors cite four phases of value clarification, namely the comprehension, relational, valuation, and reflective phases. The authors describe each phase as follows:

1. Comprehension phase – designed to get students to identify, list, and share information and knowledge about a situation or event that is to be the object of valuation;

2. Relational phase – designed to help students isolate data and associate it with the concept, topic, or idea being studied;

3. Valuation phase – designed to get students to express their preferences and feelings toward such objects of valuation as data, situations, relationships, and decisions; and

4. Reflective phase – designed to encourage students to reflect on values and feelings they have experienced and revealed publicly in response to particular aspects of the earlier phases.

To start the actual lesson, the teacher should first present the following springboard (discussion starter):

Springboard

The Case of an Ilocos Barrio: A Reading.

The Ilocos barrio in the Philippines consists of some 220 families, the majority of whom are subsistence rice and maize farmers. Over the past two decades, population growth within the barrio has been rapid. Fifteen new families have taken up land, and farm size which once average 7.4 hectares now averages 6.3 hectares. Average family size is large (7.3) and extended. While there is a range of farm products which are sold commercially (maize, eggs, chickens, garden vegetables), average farm cash income is low-in good years, 1,500 pesos (U.S. $22.4), in poor years, 1,000 pesos (U.S. $15.0) or less.

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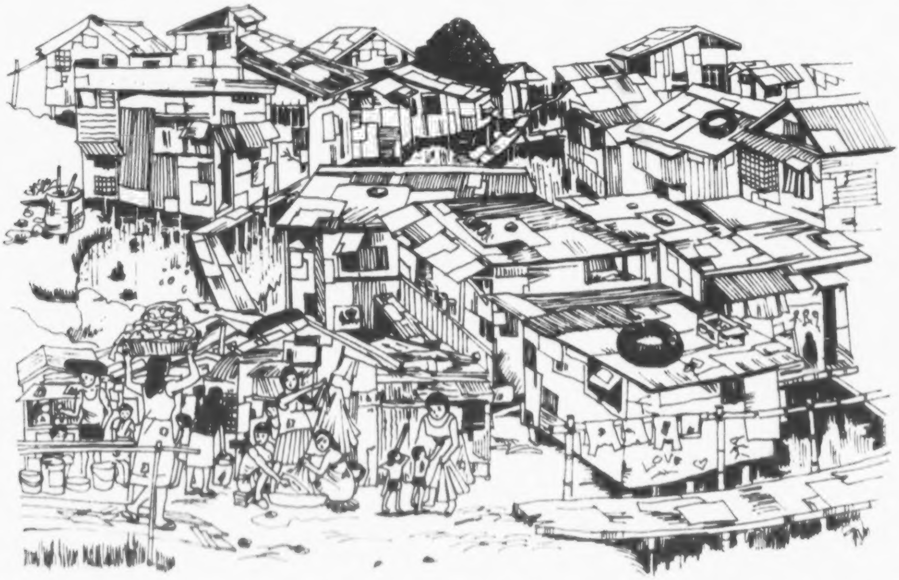
* by Leonardo de la Cruz

In poor years undernourishment is commonplace. Reports on health conditions indicate nutritional anemia in adults, a high rate of worm infestations, and the occurrence of gastroenteric conditions in malnourished children. While there is little information about actual diet, the above evidence suggests protein and calorie deficiencies.

Show pictures of hungry people



After reading the springboard, the teacher uses four interrogative modes relevant to values that might be used in the study of certain population concepts, such as rapid population increase, income, food and health.

Four Interrogative Modes : Applied population education

Empirical	**Relational**	**Valuing**	**Feeling**
1. What did you see in the picture?	To what topic/concept may what you saw be related? Explain your answer.	Is the relationship you see good or bad for mankind? Explain.	How do you feel about what you saw?
2. What have you read?	How does what you've read here relate to the topic in number 1?	Are the consequences of what you read about good for mankind? Why?	How do you feel about what is happening?
3. What have you heard about this topic/concept?	How does what you've heard here relate to the topic?	Are the consequences of what you heard good or bad for mankind?	How do you feel about what you have been hearing.

Empirical	**Relational**	**Valuing**	**Feeling**
4. What have you observed?/experienced about this topic/concept?	How does what you've observed/experienced relate to this topic/concept?	Are the consequences of what you observed/experienced good or bad for mankind?	If you found yourself in the situation you have described, what would be your most immediate feeling?

2. Comprehension

In this stage, the students are expected to come out with any "and/or" combination of the following:

a) *Topical statements* – students may isolate the idea or theme from the readings;

b) *Empirical statements* – these may be derived from the answers to the first column on the above chart;

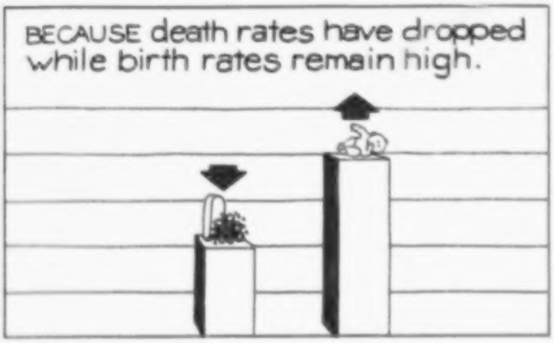
c) *Interpretive statements* – students may state their own opinions, interpretations and/or conclusions from what they see, hear, read or observe; or

d) *Clarifying* – students may reword or rephrase what they hear and read, or may elaborate on what they have observed and/or experienced.

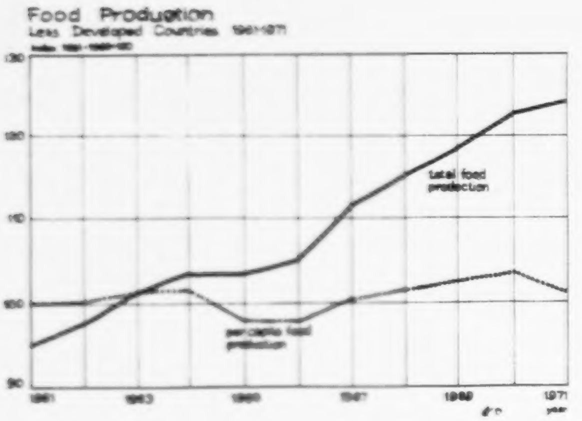
Using the particular reading presented here; the pictures; and their own observations and experiences, it is expected that the students will recognize that the lesson is focused on the concepts of *population, food, income and health.*

3. Relational phase

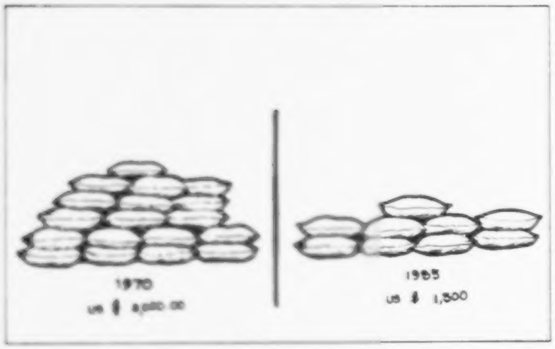
In this phase, it is expected that the students will recognize the interrelationships of the concepts of population, food, income and health. The relationships may be viewed as follows:


BECAUSE death rates have dropped while birth rates remain high.

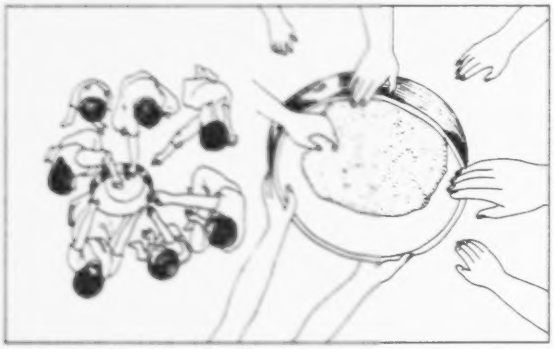
1. Rapid population growth



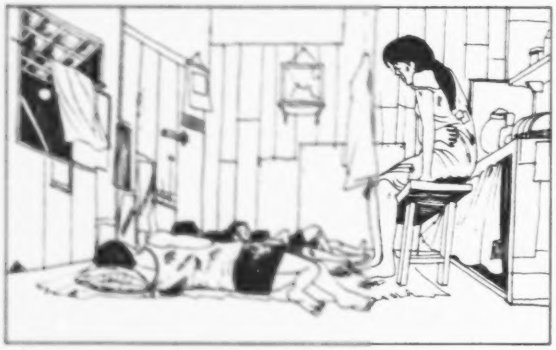
2. **Low level of agricultural productivity**



3. **Low level of farm family income**



4. **Less food for family**



5. **Poor quality of health/housing**

4. Valuation phase

Five types of statements from students may be expected during this phase, namely:

1. ***Preferential statements*** – these may take the forms of:
    a) Good, better, best vs. bad, worse, worst;
    b) Right or wrong;
    c) Correct or incorrect; or
    d) Least adequate, adequate, most adequate vs. inadequate.
2. ***Consequential statements*** – these may take the form of predicting what will happen if nothing is done about the situation, i.e. rapid population growth.
3. ***Criterial statements*** – here the students make known their frame of reference for saying that what is going on, e.g., rapid population growth and its adverse or good effects on agricultural productivity, are good or bad.
4. ***Imperative statements*** – some students may come up with "what ought to or ought not to be continued" kind of statements.
5. ***Emotive statements*** – some students may be the emotional type, hence, may come out with statements conveying personal feelings. For example, they may worry about how rapid population increase is adversely affecting agricultural productivity and farmers' income, and the consequences of the latter to the farmers' food intake and/or habits, and the ultimate bad effects on the health of many people.

5. Reflective phase

After going through the three phases, i.e., comprehension, relational and valuation phases, the students may reflect on each of these stages by raising questions like:

1. *How did I comprehend the concepts of population, income, food and health?*
2. *How did I interrelate these concepts with each other?*
3. *How valid are the bases I used for saying that the consequences of the relationships of rapid population growth, income, food and health are either good or bad?*
4. *What course of action have I arrived at?*

References

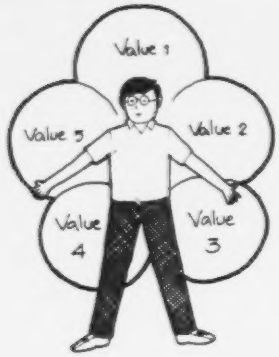
1. J. Doyle Castell and Robert J. Stahl. *Value clarification in the classroom: a primer.* California, Goodyear Publishing Co., 1975. p. 1.

Extracted from: Villanueva, C.L. *Value clarification on population education.* Makati, Population Centre Foundation, 1977, p. 114-118.

LIFE CAREER GAME

by

Barbara Vernhorst[*]



Objective

The student should be able to: develop skills for planning and decision-making with regard to the future, in terms of education, job, leisure and family life.

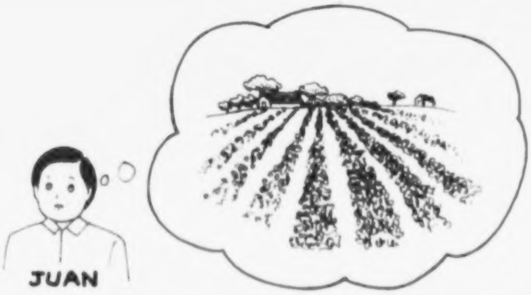
Procedures

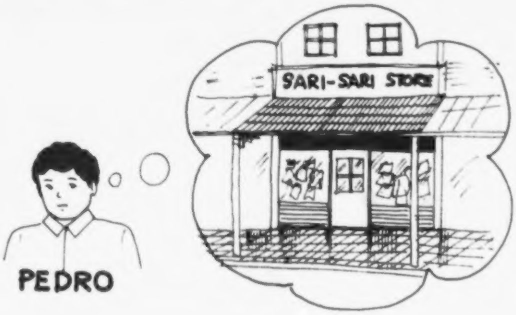
1. Introduction

This game involves planning and decision-making on the part of the students. In the Life Career Game of Barbara Vernhorst, she recommends that the class be divided into two teams. Each group is asked to plan the next 20 years of the life of a student. Vernhorst recommends that the two teams compete for points in four areas of life: education, job, leisure, and family life. Points are calculated on the basis of probability scales.

However, in this adaptation of the game, the emphasis will be on rational planning and decision-making rather than on competition.

2. Springboard





Group I will plan the life of a young man, Juan, who is about to graduate from high school. Juan is the eldest of seven children. His parents are farmers, with a piece of land of about 3½ hectares; and an average annual yield of 15 cavans of paddies. They have vegetable and fruit trees from which the family derives part of its income.

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[*] Adapted for population education by Leonardo de la Cruz.

Juan is graduating from high school. He has an average I.Q. and his general average is about 85 or B. How will you plan his life for the next 20 years?

Group II will plan the life of Pedro, the son of a foreman in a small factory. He is third in a family of five. His father is earning about 600 pesos a month or US$ 34.00. His mother has a small grocery store. They live in a city.

Pedro's I.Q. is below average and his general average is about 75 or C. How will you plan his life for the next 20 years?

Questions

The teacher will lead the class discussion by raising the following questions.

1. The Value Problem

How will you plan the lives of Juan and Pedro?

2. Value-Relevant Behaviour

For every plan suggested, a value could be inferred. For instance, what values may be inferred from the following plans:

a) Juan will go to college/university.

b) Pedro will go to technical/vocational school.

What social values may be inferred from the above?

3. Hypothesizing

If Juan goes to college/university and Pedro goes to a technical/vocational school, how would their job placements look in the plan?

What might be expected of their income level?

Who would be expected to marry earlier?

What might be expected of their family sizes?

4. Data Gathering

What evidence may be presented to prove that these expectations for both Juan and Pedro are reasonable?

5. Alternative Plans/Values

With the facts given about the lives of Juan and Pedro, what alternative life paths may be planned for them? What may be the consequences of each plan? What is the motive behind each plan? To what extent is each plan influenced by the values or standards of proponents of the plan?

6. Choosing

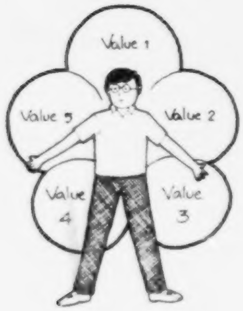
How was the final plan arrived at? To what extent are the 20-year plans for Juan and Pedro similar to what actually happens to a typical young man in our society? Does the final plan coincide with what most members of the class anticipate would be their fate in the future?

7. Stating Reasons

Why did you plan the life of Juan and Pedro the way you did? Would this contribute to national development efforts? Do you think both Juan and Pedro would be happy with the way you planned their lives? Why? Are the population-related plans the most conducive to the enhancement of quality of life? Why?

Excerpted from: Villanueva, C.L. *Value clarification on population education.* Makati, Population Centre Foundation, 1977, p. 65-66.

DEVELOPING EMPATHY VIA SONG/POETRY



Objectives

The student should be able to:

1. Extend sensitivity, react with feelings and identify with feelings of other people;
2. Develop skills of empathizing with others by understanding the worth and dignity of other individuals; and
3. Develop values through the process of affective empathy.

Activity One

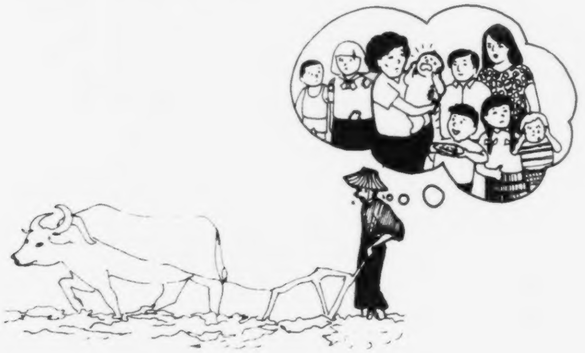
1. Introduction

Taba says, "to extend sensitivity, students need an opportunity to react with feelings and to identify with feelings of other people, whether in the reality of actual experiences or as described in fiction".[1] It should also be stressed that "feelings, values and sensitivities are matters that need to be discovered rather than taught"[2].

On the same topic, Fraenkel adds, "to help identify and empathize with others, teachers need to increase student sensitivity to the worth and dignity of the other individuals, especially those unlike themselves".[3]

Songs and poems can be used to explore students' feelings regarding certain issues. For instance, the students may be asked to read/listen to the following song and to concentrate on its message.

2. Springboard



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[1] Hilda Taba, *Curriculum development: theory and practice,* New York: Harcourt Brace Jovanovich, 1962. p. 279.

[2] Ibid. p. 224.

[3] Jack Fraenkel, *Helping students think and value,* New Jersey: Prentice-Hall, Inc., 1973.

Song of A Father

(From the Regional Population Office VIII.
Original music and Waray Lyrics: Tex
Almeria Translated into Tagalog:
Jess C. Saclo)

Filipino	**English Translation**
Ako'y isang magsasaka *Mga anak ko'y marami na* *Kahit sila'y nakakatulong* *Hindi pa rin kami gumiginhawa*	*I am a farmer* *With many children.* *Though they are able to help out,* *Still our life doesn't seem to improve.*
Kung sila ay tatlo lamang *Buhay nami'y maluwag sana* *Nguni't sila'y marami* *Kaya hirap ako sa tuwi-tuwina*	*If I only had three children,* *Life would have been easier,* *But I was destined to have many,* *Alas, causing frequent hardships.*
Chorus:	*Chorus:*
Kasiyahan ng lahat *Kapag tayo'y nagkaisa* *At pagbutihin* *Ang pagplano ng pamilya*	*For the good of all,* *Let us be united,* *In putting into better action* *The planning of our families*

The teacher explores how students feel regarding the message of the song with the use of a series of questions. Shown on the table that follows are some of the questions that may be asked together with expected responses from students and follow-through questions/comments from the teacher.

This strategy is an adaptation of one developed as part of the Taba Curriculum Development Project at San Francisco State College.

Discussion Questions

Teacher	Student	Teacher Follow-through
What is the song all about?	Describes the content.	Insures that all facts are given and agreed upon. If students make inferences, asks that they be postponed.
How do you think the father felt?	Makes inference as to the feelings.	Accepts inference.
Why do you think he would feel that way?	Explains.	Asks for clarification if necessary.
Who has a different idea about how he felt?	Makes alternative inferences and explanations.	Seeks variety if necessary. Asks for reasons if necessary.
What might be his feeling if he has less children?	Makes inferences.	Accepts inferences.

Teacher	Student	Teacher Follow-through
Why do you think he would feel that way?	Explains.	Probes into the answers.
Have you witnessed/known a similar situation?	Narrates or describes a similar situation.	Ensures detailed description of events.
Why do you think you feel that way?	Offers explanation. Attempts to relate his feelings to events he has recalled.	Asks additional questions if necessary to get beyond stereotyped or superficial explanations.

3. Suggestions to the teacher

Sometimes only some of the questions are asked. The teacher should omit questions if students have answered them spontaneously.

The questions are repeated in sequence several times in order to obtain a variety of inferences and personal experiences.

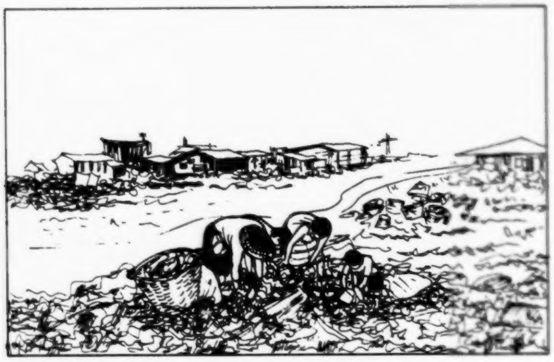
If the students have difficulty responding to the question, "Have you witnessed/known a similar situation?" the teacher may ask instead, "If this should happen to you, how do you think you would feel?" or "Has something like this happened to someone you know?" Another useful device is for the teacher to describe such an event in his own life.

The adaptability of this strategy to a certain grade/year level would depend on the selection of the song or poem and its appropriateness to the lesson. For example, this specific song "Awit Ng Isang Ama" may be used in lessons related to family size and its effects, as well as planning for the future.

Excerpted from: Population Education Programme. *Module on the value clarification approach in the teaching of population education*, Manila: Ministry of Education, Culture and Sports, 1984. p. 58-59.

Activity Two

1. Springboard



Requiem for a failure

by Terence Johnson

I view solemnly the cracked walls.
They stand cold . . . lifeless.
I view garbage overflowing in the streets.
It's filthy . . . lifeless.

Then I see my child.
He lives between these roach-infested walls.
He plays in these filthy streets.
He is full of life, by no means lifeless.

My son brings these crevice-infested walls
These filth-lined streets to life with just his presence.
They seem to laugh at me, reflecting, reflecting
Reflecting greater than any mirror, my failure.

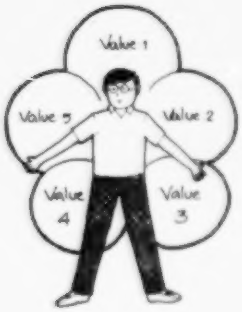
My son cannot envision his future
Only I see his destiny
It hurts to see such a glum picture.

2. Discussion Questions

Teacher	Student	Follow-up
What is the poem all about?	Describes the content.	Where might the place be?
What should mother/father do?	Suggests what might be done, such as not to have any more children.	Why did the parents fail to act that way before?
What might happen to them, if they have more children?	Anticipates what might possibly happen.	Asks students reasons why they think this will happen?
What might happen to the son?	Explains why they think this will happen to the son.	Seeks clarification of responses.
What do you think the child should do when he grows up?	Explains why he should do this.	Probes into each alternative proposed.
Why do you think he should do that?	Explains answer.	Probes into the answers.
Have you ever witnessed/experienced a similar situation?	Narrates or describes experiences.	Ensures detailed description of event(s).
What did you do?	Describes action.	Provides support, if necessary.
As you think back now, was that a good or bad thing to do? Why?	Justifies action or regrets having done such.	Accepts whatever response is given. Doesn't make any value judgments.
What else could you have done?	Describes what else could have been done.	Asks for justifications of each of the alternative actions.

Excerpted from: Villanueva, C.L. *Value clarification on population education.* Makati, Population Centre Foundation, 1977, p. 59-60.

VALUES CLARIFICATION ON DELAYED VS EARLY MARRIAGE



Objectives

The student should be able to:

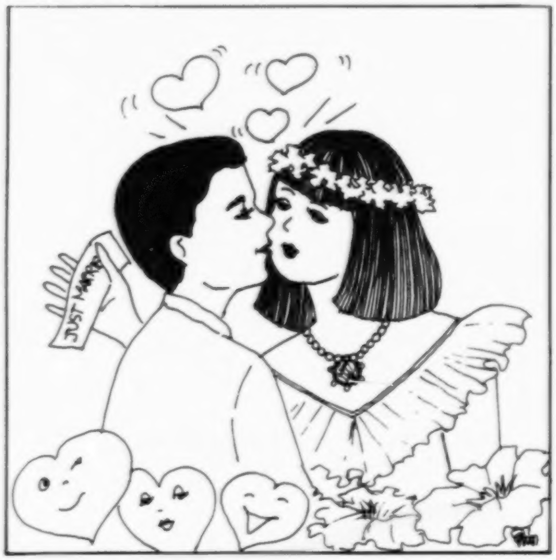
1. Understand the advantages and disadvantages of late and early marriage using the open-ended approach of values clarification; and
2. Understand the advantages and disadvantages of late and early marriages using both open-ended and closed-ended approaches.

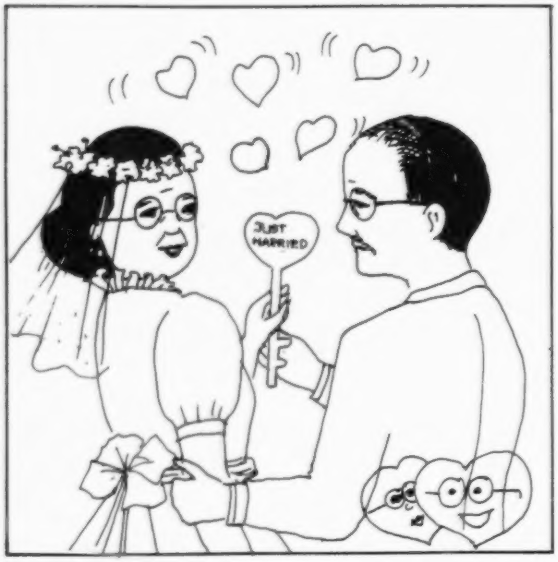
Procedures

1. Identifying the target audience

The target includes intermediate and high school students whose ages range from 11-17. This age group belongs to early and middle adolescence, characterized by rapid physical and emotional changes. Children at this age level experience value conflicts and emotional uncertainties. At this stage, they tend to idolize and idealize. They also begin to be conscious of themselves and at the same time begin to be attracted to the opposite sex.

2. Springboard





1. Pictures of newly married young couple and newly married middle-aged couple will be shown to the class.

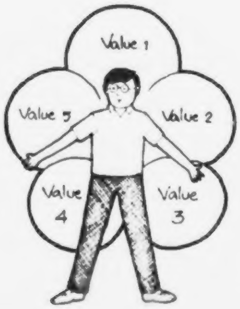
2. Have students role play situations depicting early and late marriage, after discussing the pictures (see 3 below).

3. Valuing Process

Teacher	Learner	Teacher Follow-up
1. Teacher presents pictures of two newly married couples – one young and the other old.	Students react.	Teacher provides situations.
2. Teacher asks students to hypothesize why two newly married couples got married at those ages.	Students hypothesize or make predictions.	Teacher accepts hypotheses.
3. Teacher suggests situations for role-playing.	Students participate in role-playing.	Teacher asks additional questions for clarification.
4. Teacher asks students to examine and verify their inferences.	Students classify findings.	
5. Teacher asks students to relate similar or related stories about late and early marriages.	Students describe similar events.	Teacher relates similar situations on early and late marriages for purposes of reinforcement.
6. Teacher asks students' feelings and positions about the matter.	Students cite reasons for their feelings.	Teacher seeks clarification, provides support if necessary.
7. For evaluation of lesson, teacher may ask students to take a stand and give their reactions.	Students write down their stand on the subject.	Teacher thoroughly reads students' work to judge effects of value-clarifying process.

Excerpted from: Villanueva, C.L. *Value clarification on population education.* Makati, Population Centre Foundation, 1977, p. 113-114.

VALUE CLARIFICATION STRATEGIES USING VARIOUS SPRINGBOARDS SUCH AS PICTURES, VALUES SHEETS, VALUES GRID, AND PERSONAL COAT OF ARMS



Objective

The student should be able to: develop knowledge and skills in using various values clarification strategies dealing with different population education issues.

Procedures

Strategy No. 1 : Value clarifying discussion using picture without caption

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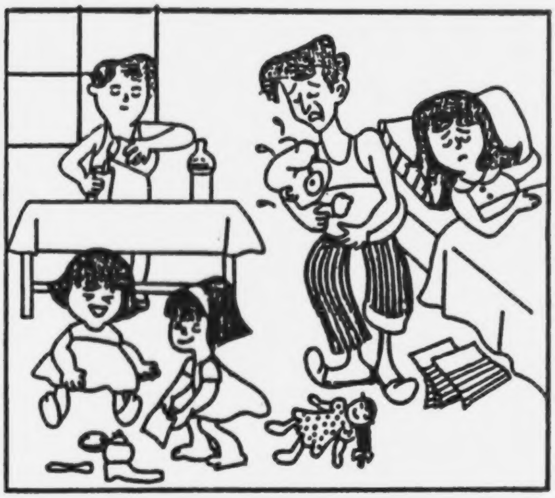
The teacher brings in a picture which involves a story of some kind. It must be large enough to be seen from all parts of the room. Students are asked to supply a caption describing what is going on. After various captions are examined in the light of the available evidence, an attempt is made to see what the students would have done in a similar situation.

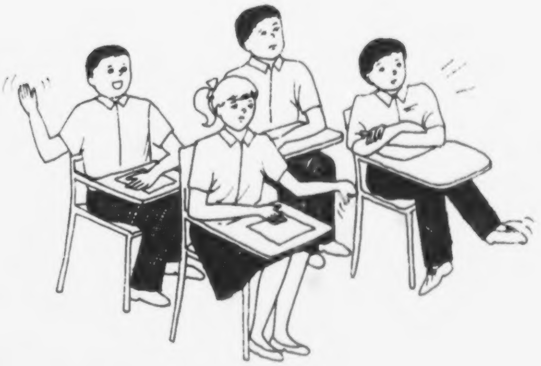
An example of a picture that may be used in a population education class is seen here:



To the Teacher

This is an excellent strategy to use when you sense the class is thinking narrowly and unimaginatively about an issue. Teachers both in the elementary and secondary levels can make use of it to great advantage.

Strategy No. 2 : Values voting



Purpose

Voting provides a simple and very rapid means by which every learner in the class can make a public affirmation on a variety of values issues. It develops the realization that others often see issues quite differently than we ourselves do, and legitimizes that important fact.

Procedure

In this strategy the teacher reads aloud one by one questions which begin with the words.

"How many of you. . .?" For example, "How many of you believe there is a population problem in our country?"

After each question is read, the learners take a position/stand by a show of hands. Those who wish to answer in the affirmative raise their right hands. Those who choose to answer negatively point their thumbs down. Those who are undecided fold their arms. And those who want to pass simply take no action at all. Discussion is postponed until after the list has been read.

Suggestions to the Teacher

Voting is an excellent way to introduce a list of questions which probe the learners' feelings, thoughts and actions on the issues to be taken up. Giving students a chance to vote is an effective way to stimulate interest in the lesson.

This strategy can be used by teachers in the elementary and secondary levels. Voting lists should not be too long. They lose their effectiveness after about ten or more items.

The teacher may encourage the learners to prepare a voting list of their own so that they will be involved in making decisions regarding value issues to be discussed in class.

Example:

How many of you. . .

1. ___________ wish there were more/less children in your family?

2. ___________ approve of people marrying as young as possible?

3. ___________ think there is nothing wrong for the government/state to decide how many children a couple should have?

4. __________ believe that there is a good reason for including family planning in population education?

5. __________ would like to move to a different house?

Strategy No. 3 : Self contracts

Purpose

It is one thing to talk about wanting something in life and another thing to do something about getting it. This strategy attempts to close the gap between what we want and what we are doing to achieve it.

This strategy can follow any values activity which generates feelings about how we live our lives. When we are seriously thinking about the quality of our lives – this is the best time for Self Contracts.

Procedure

The teacher can introduce the activity like this:

"Have you ever made contracts with yourself?"

"In this activity you are going to make a contract with yourself about some change you would like to make in your life. It can involve starting something new, stopping something old, or changing some present aspects of your life. For example, perhaps you want to do something about population education. You might make a self-contract about it."

Let the learners write out their contracts and volunteers may read them to the class. A week or so later, the class can take time to share and discuss how well they have been doing in carrying out their contracts. Some examples of contracts are given below.

Suggestions to the Teacher

The teacher can also participate in this activity.

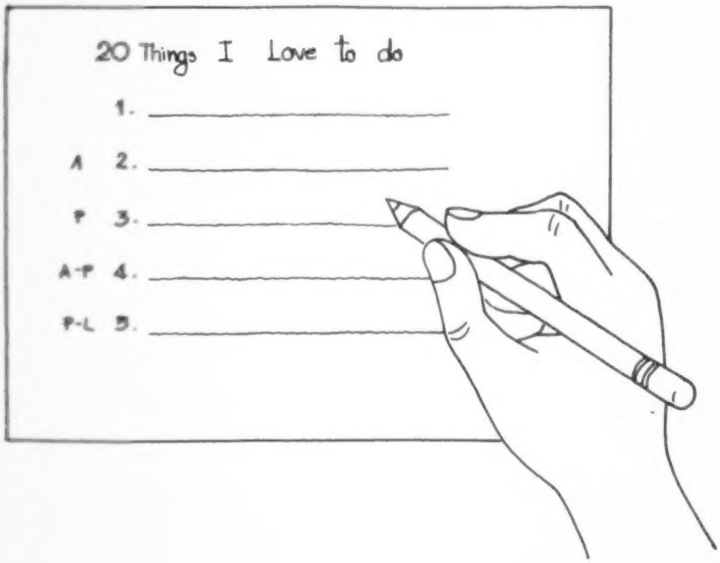
Try to teach the learners to make specific and realistic contracts which can be completed. The following activities are examples of what they can do:

1.	Make a study of why people in the community migrate	(Gr. III – social studies)
2.	Participate in a reforestation project	(Gr. VI – elem. science)
3.	Conduct small group discussions on planning for the future, with your friends or family	(IV-Yr. – social studies)

Strategy No. 4 : Twenty Things You Love To Do

Purpose

An important question to ask in the search for values is, "Am I really getting what I want out of life?" A person who simply settles for whatever comes his way rather than pursuing his own goals, is probably not living a life based upon his own freely chosen values. He usually ends up by feeling that his life is not very meaningful or satisfying. However, before we can go about building the good life, we must know what it is we value and want. This activity helps students examine their most prized and cherished activities.


20 Things I Love to do
1.
A 2.
P 3.
A-P 4.
P-L 5.

Procedure

The teacher passes out paper and asks the students to write the numbers from 1 to 20 down the middle of the sheet. He then says, "And now will you please make a list of 20 things in life that you love to do."

To encourage the students to start filling out their lists, he might add, "They can be big things in life or little things". He may offer an example or two of his own. Or he might suggest, "You might think in terms of the seasons of the year for things you love to do."

The teacher also draws up his own list of twenty items, and as he reaches the end of his list, he might tell his students that it is perfectly all right if they have more than 20 items, or fewer than 20 items on their lists.

When the lists are done, the teacher tells the student to use the left-hand side of their papers to code their lists in the following manner:

1. A peso sign (₱) to be placed beside any item which costs more than ₱3 each time it is done. (Use your local currency – the amount could vary, depending on the group.)
2. The letter A is to be placed beside those items the student really prefers to do *alone;* the letter P next to those activities he prefers to do with other *people;* and the letters A-P next to activities which he enjoys doing alone or with other people.
3. The letters PL are to be placed beside those items which require planning.
4. The coding N5 is to be placed next to those items which would not have been listed five years ago.
5. The numbers 1 through 5 are to be placed beside the five most important items. The best loved activity should be numbered 1, the second best 2, and so on.
6. The student is to indicate next to each activity when (day, date) it was last engaged in.

To the Teacher

This strategy can be repeated several times throughout a year. It is a good idea to save the lists and compare them over a period of time.

Any more than five or six codings at one sitting generally overwhelms the student.

The teacher might see ways of making additional use of the lists. For example, he might ask his students to describe on paper or orally to a partner how they would like to do the item they marked with the number 1. The student would tell with whom, at what time, under what circumstances, he likes to engage in the chosen activity.

Or the teacher might ask the student to choose one of the items in his list and then list privately, or discuss with a partner, five advantages, pleasures, gains, benefits, or satisfactions he gets from that activity.

A student might volunteer to write his list on the board, with the option to omit any items he'd rather not share.

Strategy No. 5 : Values grid

Purpose

The Values Grid is another technique for showing how we develop our values. It usually drives home the point that few of our beliefs or actions fit all seven of the valuing processes. This activity indicates what steps we must take in order to develop stronger and clearer values.

Procedure

The teacher either gives students, or asks them to construct, a value grid, as shown below:

ISSUE	1	2	3	4	5	6	7
1.							
2.							
3.							
4.							
5.							

Then the teacher and the student name some general issues, such as water pollution, population control, abortion, race relations, a specific election or a school issue. The students list these issues on the lines on the left-hand side of their papers. Next to each of these general issues the student is to privately write a few key words that summarize for him his position or stand on that issue.

The seven numbers heading the columns on the right-hand side of the paper represent the following seven questions:

1. Are you *proud* of (do you prize or cherish) your position?
2. Have you *publicly affirmed* your position?
3. Have you chosen your position from *alternatives?*
4. Have you chosen your position after *thoughtful consideration* of the pros and cons and consequences?
5. Have you chosen your position *freely?*
6. Have you *acted* on or done anything about your beliefs?
7. Have you *acted with* consistency on this issue?

The teacher can read these seven questions to the students, or write them on the board, or the students can write the key words (those that are underlined) at the top of each column. The students then answer each of these seven questions in relation to each issue. If they have a position response to the question on top, they put a check in the appropriate box. If they cannot answer the question affirmatively, they leave the box blank.

To the Teacher

After they have completed marking their grids, the students can form trios, with each student discussing one of the issues, his position on it, and how it did or didn't involve the seven valuing processes. Your students have undoubtedly engaged in many discussions of the issues they have listed in the values grid. It is worthwhile for the students to note how the approach here differs from discussions they have had previously. It should become apparent that here they are not being called on to defend the content of their beliefs, but are rather being asked to evaluate how they arrived at their convictions and how firm they are in their beliefs.

The students should understand the seven processes, which are the basis for the values strategies they are doing. Many teachers post the seven processes permanently in the classroom.

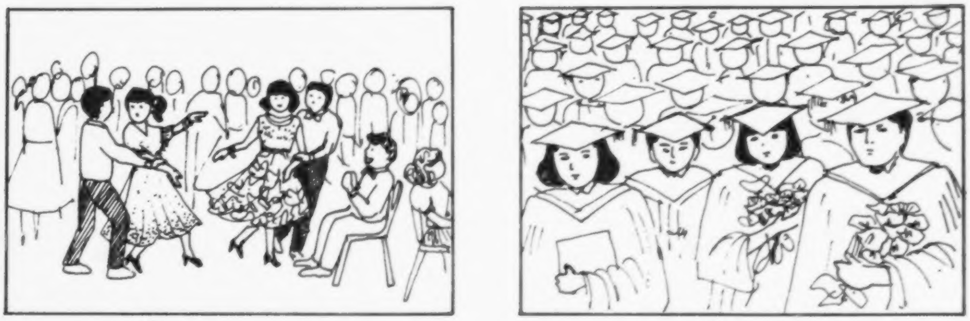
The students might want to save their papers and look at them again at some future date. They will be able to see not only whether the content of their beliefs has undergone any change, but, more important, whether there have been any changes in the quality and degree of their convictions.

Strategy No. 6 : Two ideal days

Purpose

As part of the life-planning series, this strategy makes the point that we ought to be clear about what we want out of life. Students are asked to construct two perfect days, and in the process they learn more about what they really love in life.

Procedure



Day 1

Day 2

Two Ideal Days

The teacher says, "Project yourself into the future, any time from tomorrow to several years from now, and imagine two days that would be ideal for you. Imagine 48 hours of what for you would be the best possible use of that period of time. You can fantasize whatever you want; the only limit is the time limit of 48 hours."

"Write about your perfect, ideal two days. Talk about where you would be, what you would be doing, who else might be there, and so on. Try to picture what you would be doing for the full 48 hours. Go into as much detail as you can picture in your fantasy – smells, sounds, the weather, if they play a part."

After all the students have written about their ideal days, the teacher asks for volunteers to read their stories aloud or he divides the class into small groups in which students share their ideal days.

Strategy No. 7 : "I learned" statements

Purpose

This strategy serves several purposes. It provides the group and the teacher with feedback about the last activity they participated in. It helps clarify and reinforce what the students have learned. It crystallizes new learning which many students might not have realized was taking place. It sets a very powerful searching tone in the group. Finally, it provides a good summary or wind-up for almost any activity.

Procedure

The teacher prepares a chart with the following (or similar) sentence items. The chart may be posted permanently in the room, or it may be posted just when it is to be used.

I learned that I...
I re-learned that I...
I noticed that I...
I discovered that I...
I realized that I...
I was surprised that I...
I was pleased that I...
I was displeased that I...

Right after a values activity or discussion, the teacher asks the student to think for a minute about what they have just learned or re-learned about themselves or their values. Then they are to use any one of the sentence stems to share with the group one or more of their feelings. Students are not called on, but volunteer to speak whenever they feel comfortable about it.

To the Teacher

Sometimes it is helpful the first time around to have students write down a new *I learned statement* before sharing it aloud. It is also helpful if the teacher provides students with one or two examples of *I learned statements.* For example. "I realized that I was not clear about my religious beliefs." "I was surprised that I felt disappointed when someone gave an opinion about morality that was different from mine."

The teacher should not allow discussion to interrupt the free flow of *I learned statements;* it tends to destroy the mood and intensity of the activity. Statements should be kept short and to the point. Students should make their statement but not attempt to explain or defend it.

Try to help students focus on personal learning rather than on general, intellectualized learnings. There is a tendency to say, "I learned that people. . . " rather than "I learned that I . . .".

Reassure the students that there are no right answers. And students should always have the freedom to pass or sit the activity out without saying anything.

If the teacher thinks it advisable, he may break up the class into small groups of from three to five members and have these students share and discuss their *I learned statements* with one another.

Sometimes students can simply compile a list of *I learned statements* in writing which they date and save. It is not always necessary to share these ideas with others.

Strategy No. 8 : Value sheet (Based on Raths, Harmin & Simon)

The value sheet usually consists of provocative statements and a series of questions. These are given to students to fill in individually. The purpose is to raise an issue that the teacher thinks may have value implications for students. The questions are aimed to carry every student through the valuing process for that issue. The answers/reactions of students may later be shared with other members of the class.

An example of a value sheet is given below:

Test Tube's Third Baby

Directions: Write out answers to the questions. Later, you will have a chance to discuss your answers with your classmates. You may choose the items you wish to share with them.

Australia's first, and the world's third test-tube baby was born in Melbourne last month.

Candice Elizabeth Reed was the first test-tube baby conceived outside her mother's body to be born normally. The other two test-tube babies, both in Britain, were born by Caesarian section.

Candice's life began when an egg removed from her mother was fertilized in a laboratory by her father's sperm. Her tiny embryo was then implanted in her mother's womb.

Mrs. Linda Reed was one of about 100 women who volunteered for the experiment conducted by the Queen Victoria Medical Centre and Monash University, both in Melbourne. Mrs. Reed, 25, was unable to conceive naturally because of blocked fallopian tubes, the major reason why many women cannot conceive.

1. Write your reaction to this news item in just a few words.
2. If you have relatives who cannot have babies normally, would you recommend this way of having babies?
3. What are your reasons for your answer?
4. Do you foresee any problem in connection with having test tube babies?

To the Teacher

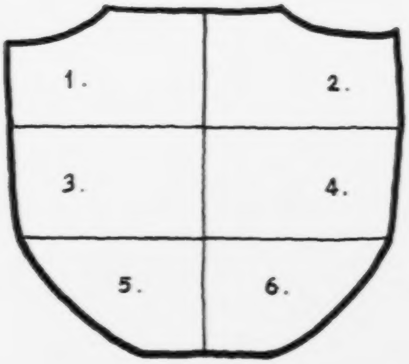
This strategy aims to assist students identify their values. It can be used in any grade/year level depending on the material chosen for the value sheet. Its effectiveness would lie in its relevance to specific lessons, e.g., the "Test Tube's Third Baby" may be used in connection with the lesson on fecundity, fertility and sterility.

Strategy No. 9 : The personal coat of arms : a valuing strategy

A coat of arms denotes a shield bearing heraldic insignia. For a 13th century knight, it was a symbol of his accomplishments and identity. A student can create her own coat of arms as an exercise in defining what she stands for.

Sidney Simon used the coat of arms as a means to learn more about some strongly held values, as well as the importance of publicly affirming what we believe, that is, literally wearing our values over our shields.

The coat of arms shield suggested by Simon is divided into six sections illustated as follows:



In this teaching technique, the teacher makes it clear that words are to be used only in the sixth block. All the others are to contain pictures/drawings and/or figures.

This is not an art lesson, hence crude figures are accepted. If one were to use this technique in the field of population education, one might give the following instructions:

1. In block 1, draw two pictures, one to represent the size of your family and one to show the family size you would like to have.
2. For block 2, make or cut out a picture to show one of your firmly-held values regarding population issues, one from which you will never deviate.

3. Draw or cut out a picture in block 3 to show a population-related value which your family lives by (extended family, early marriage, etc.) There should be a consensus over the value among the members of your family.
4. In this block, imagine that you could achieve something for your community's/country's population. What would you strive to do?
5. In this block, show one of the population-related values (equality, absence of poverty, etc.) you feel deeply about, and which you would like all men to have an equal concern for.
6. In the last block, you may write what you would like people to say about your stand on population issues.

The class may be divided into four groups. In each group, the members will discuss the population-related values of each set of pictures/drawings/figures.

Each group will select the best population-related idea for each block. This will be drawn by the artist of the group. Each group will present a coat of arms.

The members of the class then discuss the population-related values of each block in the coat of arms. Students' values as regards population matters are expected to be varied and conflicting, hence the discussion of each block in the four coats of arms will probably lead to identification of values, value judgements and value clarification.

To the Teacher

This strategy provides opportunities for students to reflect and affirm publicly the values they hold related to population matters. Social studies teachers in the high school can use it in discussing population issues, planning for the future, and one's responsibility or role in reducing the size of the family.

Excerpted from: Population Education Programme. *Module on the value clarification approach in the teaching of population education.* Manila, Ministry of Education, Culture and Sports, 1984, p. 37-48.